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The Economic Performance of North Carolina



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A REPORT OF THE GOVERNOR'S COUNCIL FOR ECONOMIC DEVELOPMENT
RALEIGH
DECEMBER, 1968

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The Economic Performance of North Carolina



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RALEIGH

DECEMBER, 1968



DAN MOORE, *Governor of North Carolina*

Statement from the Governor

The often-stated goal of my Administration has been to provide the means for a better and more useful life for every man, woman and child in North Carolina. Our program has been one of total development, of increasing the State's ability to assist and accelerate growth, of involving business and industry and agriculture—along with government—in providing new and better opportunities for all.

There is much evidence of success: Industrialization has occurred at the most rapid rate ever. Employment has increased substantially and there are "better paying" jobs available. Unemployment and underemployment are down. Personal income is up. Migration from the State has virtually ceased.

But, many problems remain: Average income is still too low. There are too many families who have not yet shared in the benefits of progress. In some instances, North Carolina has not yet capitalized on its abundant resources.

In order to facilitate the partner relationship between private enterprise and State Government in economic development, I formed the Governor's Council for Economic Development in March of 1967. Some of the outstanding business, agriculture, and industry leaders were selected to serve along with an advisory committee of key State officials.

This Council has been an asset to my Administration. But, its attention has not been limited to the day-to-day economic problems. It also has looked to the future. It has considered quality as well as quantity of future growth. It has considered manpower training and the creation of better job opportunities.

This report on *The Economic Performance of North Carolina* is the result of the Council's work. The study was conducted under the direction of the Council, with the assistance of Dr. C. E. Bishop, Dr. E. Walton Jones and Edward Long. I commend this report to the attention of all who are concerned with North Carolina's economic development.

This report contains a suggested plan to enhance future economic development. It is the first such study made under the auspices of State Government. Its proposals should be continually reviewed and updated in light of new developments.

This study of economic performance is but one of several such studies undertaken during my Administration. Higher education, public schools and highways are among other areas of State service which have received careful study. They help to constitute the first major efforts at long-range planning ever undertaken by State Government in North Carolina.

In complimenting the Council for Economic Development for its work in the preparation of this report, I want to emphasize the need for the continuation and further development of the planning process. Adequate planning in economic development—as in other areas—can be the difference between government's meeting or not meeting its responsibilities to the people of North Carolina.





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International Business Machine Corporation
Research Triangle Park, North Carolina

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Belk Stores Service, Inc.
Charlotte, North Carolina

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THE ECONOMIC PERFORMANCE OF NORTH CAROLINA

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The Economic Performance of North Carolina

The economic performance of a state is measured in terms of the well-being of its citizens. A strong, healthy economy is evidenced in (1) rising real per capita incomes, (2) expanding employment opportunities, (3) education and health services consistent with the needs of the people, (4) and increasing cultural opportunities.

This report focuses primarily upon recent improvements in the income and employment of the people of North Carolina. The purpose of the study is threefold: (1) to determine the progress made by North Carolina in improving employment and income of its citizens; (2) to identify the major impediments to more rapid development of the State; and (3) to determine the kinds of programs that are necessary for substantial improvement in the well-being of the people of the State.

Goals of Economic Policy

The relatively low position of North Carolina in income per capita is one of the primary concerns of people throughout the State. Accordingly, an improvement in the real per capita income of the State should be one of the objectives of economic policy. The principal means to higher real per capita income are through full employment of resources and higher earnings for resource services.

Full employment has long been a basic goal of economic policy in the State and nation. Unemployment and part-time or seasonal employment represent waste. More importantly, unemployment and underemployment place a severe hardship upon the people directly involved. It is important, therefore, that the State emphasize programs to provide full employment of resources.

The earnings received for resource services are a measure of the quality of employment. Although the attainment of full employment is important, it is not sufficient to achieve substantially higher real per capita incomes. In recognition of this fact, North Carolinians are becoming increasingly concerned about the kinds of jobs created in the State. In order to obtain higher earnings for resource services, emphasis must be placed upon programs that develop the potential of the human resources and other resources in the State, and more attention must be given to obtaining better jobs for people—jobs that pay higher wages and industries that yield higher returns to management and capital.

The State also is concerned that a good distribution of income among the people should be achieved. As

the general level of income has risen, people have become more concerned about those who have been bypassed by economic progress. Both the national and state governments are concerned that all citizens have a reasonable level of living. It has become increasingly evident that enough jobs must be created for everyone to earn a reasonable income or government must provide for minimum needs through public assistance programs.

Communities, as well as people, may be bypassed by economic development. The State is interested, therefore, in achieving widespread geographic distribution of economic growth. Increasingly, Americans are coming to realize that heavy concentration of people into a few large metropolitan centers can have serious implications. North Carolina does not now have the extreme ghettos and many of the problems faced by states which contain metropolitan centers of several million population. Through planning for orderly growth and development, North Carolina can prevent the emergence of such problems.

In summary, in this report, emphasis will be placed upon the generation of income, the employment of resources, the distribution of income among the people, and the geographic distribution of economic activity within North Carolina.

Measures of Economic Performance

How has the economy of North Carolina performed in relation to the economic goals outlined in the preceding section? The growth and development of the State can be gauged by comparing changes in selected variables over time. In this way we gain insights into progress being made in the State in comparison with earlier times. In order to adequately assess progress, consideration also must be given to how well the State is doing relative to competing states and to the nation. Accordingly, changes in the share of the nation's income and economic activity in North Carolina are emphasized. Comparisons also are made of growth in North Carolina and in seven other states.

The states selected for comparison include two southeastern states, Georgia and South Carolina, which have problems similar to those of North Carolina. These states have resources and an industrial structure similar to that of North Carolina, and compete directly with North Carolina for industrial plants and for markets. Comparisons are made with Iowa and Indiana, which have a large agricultural component in their economy, and which like North Carolina, are trying to achieve more widespread industrial develop-

ment. Kentucky and Pennsylvania were selected for comparison since they have a large population living in small towns and are potential competitors with North Carolina for industrial plants and markets. Connecticut was selected for comparison because of its high per capita income and its advanced stage of industrialization, and because it is believed that North Carolina must acquire more of the characteristics of other highly industrialized states if it is to improve greatly its relative income position.

Recent Economic Performance in North Carolina

Income Growth

There is no question but that North Carolina has made great progress recently in generating income. Since 1950, real personal income in the State has almost doubled. However, the growth has not been uniform over time. The amount by which personal income has changed from one year to the next is shown in Figure 1. During the 1950's, there was great variation from year to year in the changes in personal income. In 1957, total personal income decreased. In contrast, the annual additions to income were exceptionally large from 1963 through 1966.

Although personal income in 1960 was higher than in 1950, the average annual rate of increase in income

from 1960 to 1967 was almost twice the annual rate of increase during the 1950's (Figure 2). The income base in North Carolina in 1960 was greater than that of the other states with which it is compared in this study except for Pennsylvania and Indiana. Even so, during the 1960's the rate of increase in personal income in North Carolina exceeded that for all of the states with which it is compared except Georgia and South Carolina.

Change in the share of the nation's income accruing to a state is a measure of relative income growth in that state. Since all states endeavor to increase their income, changes in the share to any one state should be expected to be small. As a consequence of the slow growth in income during the decade of the 1950's, the percentage of the nation's total personal income accruing to North Carolinians decreased from 1.87 in 1950 to 1.79 in 1960 (Figure 3). The progress made in generating income in the State in the 1960's is evidenced by the fact that this downward trend was reversed and the share of the nation's personal income received by North Carolinians increased to 1.94 percent in 1967. The share of the nation's total personal income accruing to Pennsylvania decreased from 1960 to 1967 as well as from 1950 to 1960. In contrast, Connecticut was able to increase its share of the nation's total personal income in both decades.

Growth in personal income in all states included in this study has been at a higher rate than the growth in

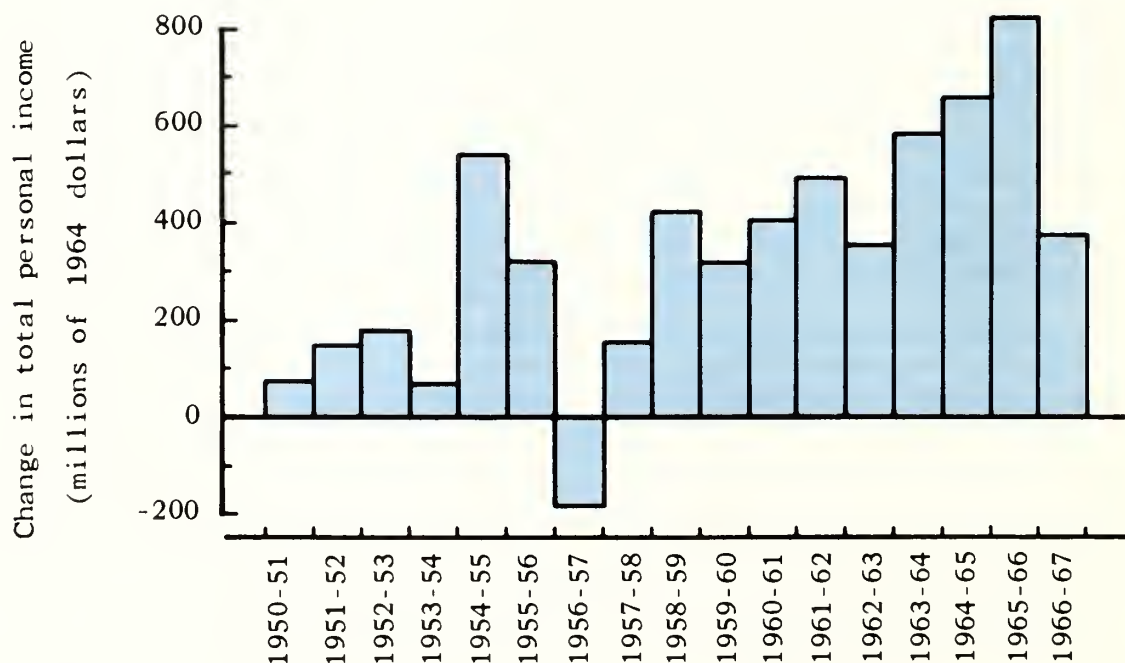


Figure 1. Annual Change in Total Personal Income for North Carolina, 1950-67

Source: *Survey of Current Business*, Office of Business Economics, U. S. Department of Commerce, April 1968

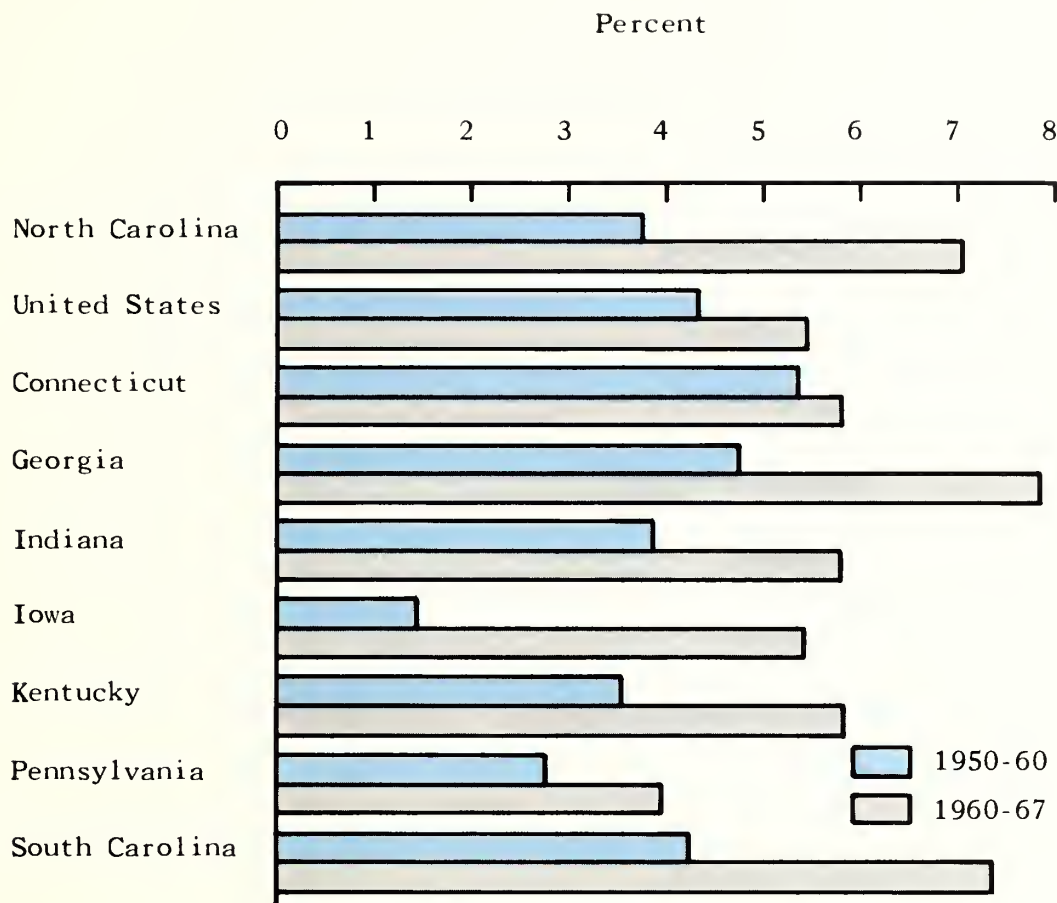


Figure 2. Average Annual Percent Change in Total Personal Income for U. S. and Selected States, 1950-60, and 1960-67 (1964 dollars)

Source: *Survey of Current Business*, Office of Business Economics, U. S. Department of Commerce, April 1968

population. Accordingly, real per capita personal income has increased in all of the states (Figure 4). In terms of 1964 dollars, per capita income in North Carolina increased from \$1,338 in 1950 to \$2,227 in 1967. Total personal income in the State was 50 percent higher in 1967 than in 1960. Per capita personal income was 36 percent higher than in 1960.

The rate of growth in real per capita income in North Carolina has been greater than that for the nation as a whole. Even so, the actual dollar difference between per capita income in the State and in the nation increased during the decade of the 1950's. Since 1957, there has been no increase in the difference between per capita income in North Carolina and in the rest of the nation (Figure 5). In 1967, per capita personal income in North Carolina was \$688 less (1964 dollars) than the average per capita personal income for the nation as a whole. This was substantially less than the peak gap of \$746 in 1957, the year in which total personal income in North Carolina decreased. Even so, no sustained progress has been made in closing the gap, and this remains a major challenge for the State.

In summary, the data presented in this section show a sharp contrast in the economic trends in North Carolina during the decade of the 1950's and those that have occurred thus far in the 1960's. During the 1950's, the State made little absolute progress, its share of the nation's income declined, and the difference in per capita income in North Carolina and the nation increased. In contrast, significant improvements have been achieved during the decade of the 1960's. The trends of the 1950's have been reversed and North Carolina's share of the nation's income has increased. Even so, North Carolina continues to occupy a relatively low position in per capita personal income.

Full Employment of Resources

For many reasons, the attainment and maintenance of full employment is not easy. The demand for products varies over time. Industries move to and from North Carolina, affecting the demand for labor. Labor moves in and out of the State, affecting the supply of labor. Technological improvement creates new jobs

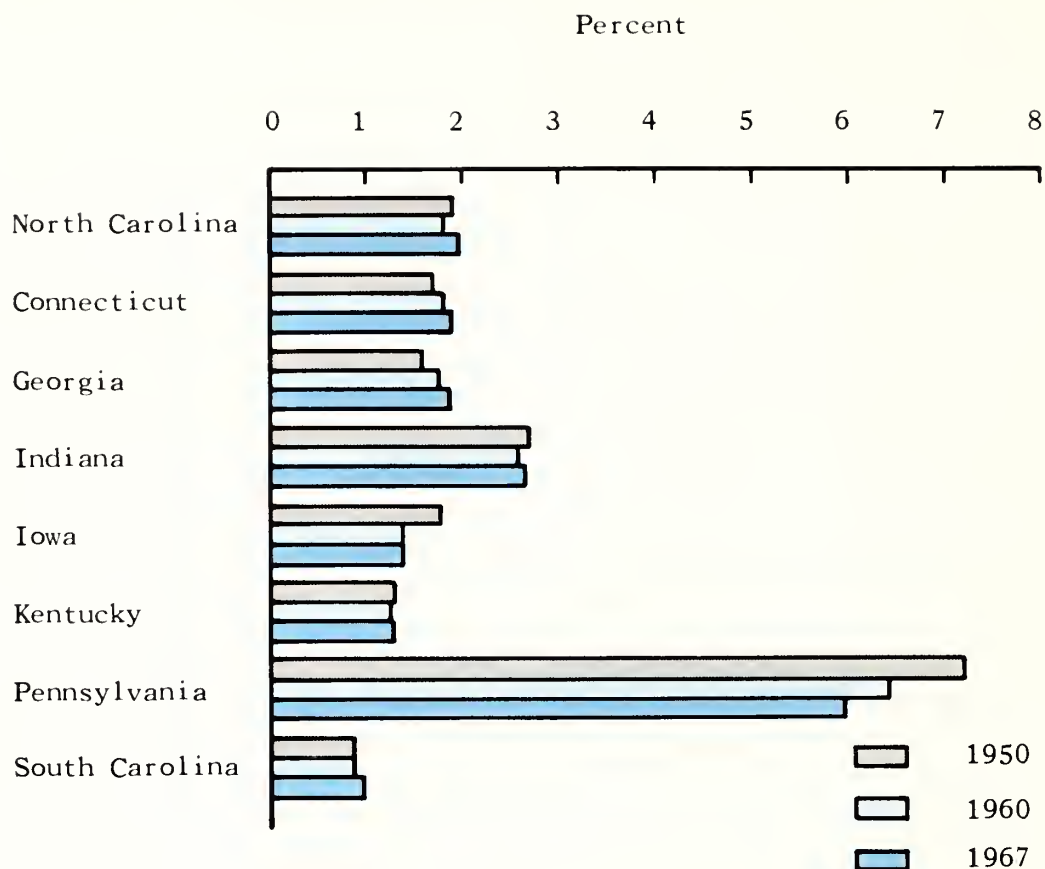


Figure 3. Percent of the Nation's Total Personal Income in North Carolina and Selected States, 1950, 1960, 1967

Source: *Survey of Current Business*, Office of Business Economics, U. S. Department of Commerce, April 1968

within the State, but it often destroys old jobs. Nevertheless, in a strong viable economy, the number of persons employed increases and unemployment decreases.

The net change in employment in North Carolina varies sharply from year to year. During three years of the 1950's, there was a net decrease in employment (Figure 6). When the national economy began to show more vigor during the 1960's, employment began to increase steadily in North Carolina. The largest net increase in employment in the history of North Carolina, 87,000, occurred in 1966. In 1967, when growth slackened at the national level, North Carolina experienced little growth.

Because of the slow growth in employment in North Carolina during the 1950's, the State had a lower percentage of the nation's total employment in 1960 than in 1950. Migration from the State was heavy. Total employment of males was 2,300 less in 1960. About 37,000 fewer nonwhite males were employed in North Carolina in 1960 than in 1950. However, there was a substantial increase in the number of females em-

ployed, and, on balance there was a net increase in total employment during the decade.

As a result of the substantial recent net additions to employment, North Carolina now has a larger share of the nation's employment than it had in either 1950 or 1960. In recent years, North Carolina has made greater progress in increasing its share of the nation's employment than most of the other states included in this study (Figure 7).

The relatively low income position of North Carolina is not due to a heavy incidence of unemployment of labor in the State. It should be emphasized that the unemployment rate in North Carolina compares favorably with that of the nation and with most of the other states included in this study (Figure 8).

Although unemployment rates are not available for North Carolina and other states by characteristics of persons in the labor force, it is likely that the characteristics of the labor force that are related to a high rate of unemployment are similar at both the national and state levels. For the nation, the unemployment rate is highest among teenagers, nonwhites, female

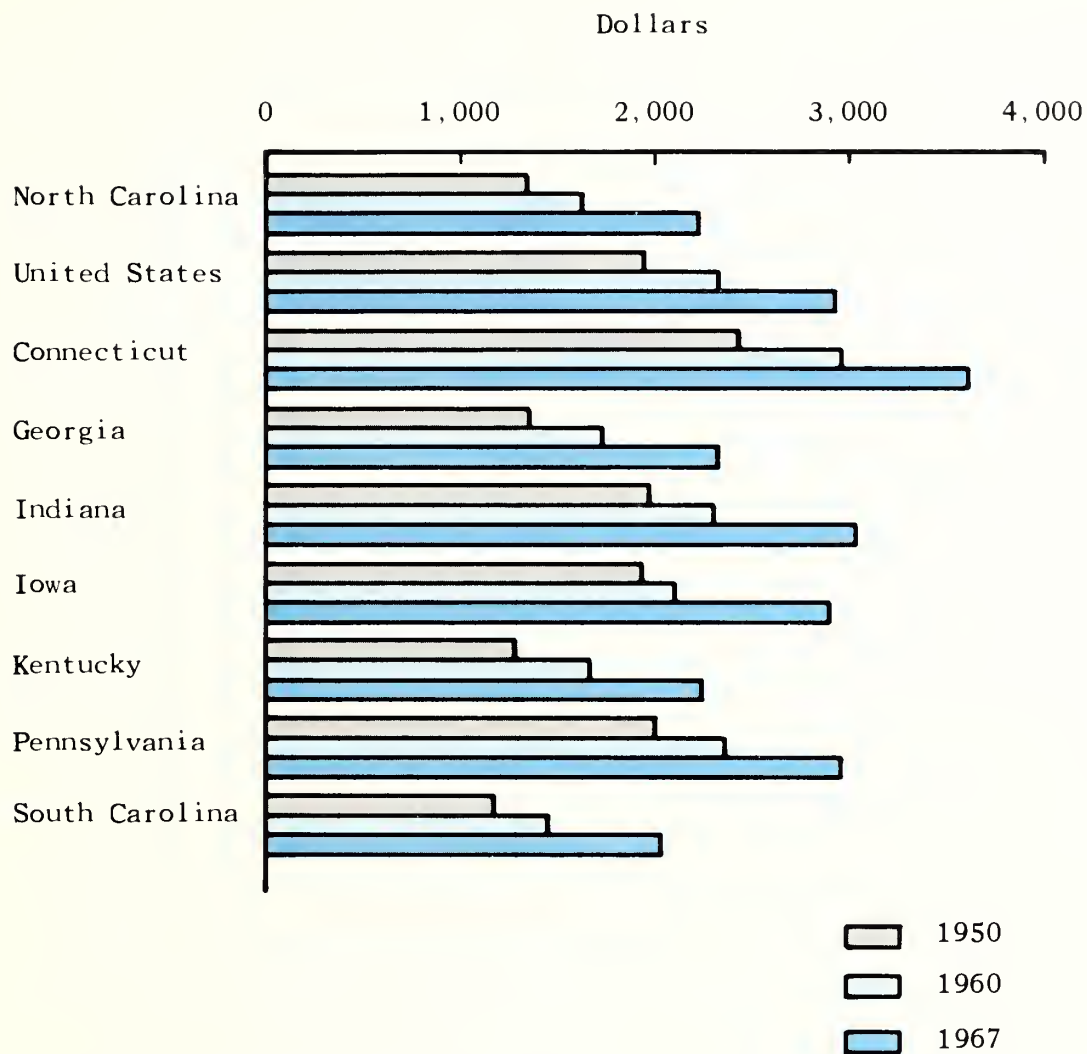


Figure 4. Per Capita Personal Income in the United States and Selected States, 1950, 1960 and 1967

Source: *Survey of Current Business*, Office of Business Economics, U. S. Department of Commerce, April 1968

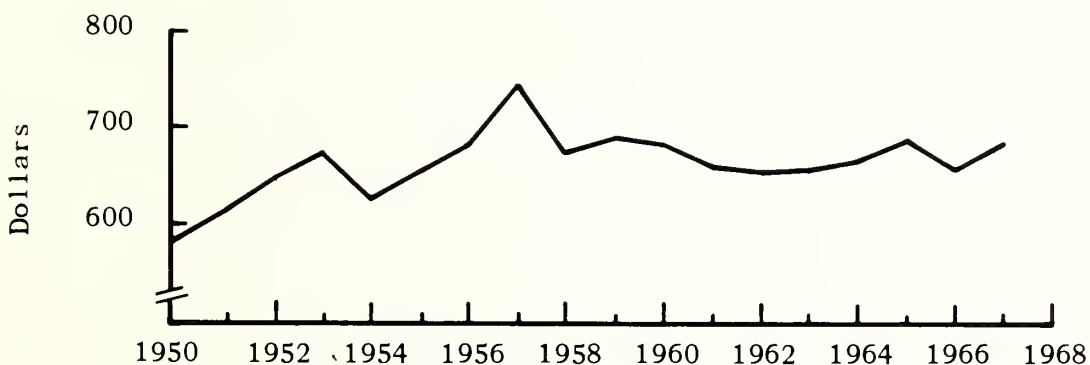


Figure 5. Amount by Which Per Capita Personal Income in the United States exceeds that of North Carolina, 1950-1967.

Source: *Survey of Current Business*, Office of Business Economics, U. S. Department of Commerce, April, 1968.

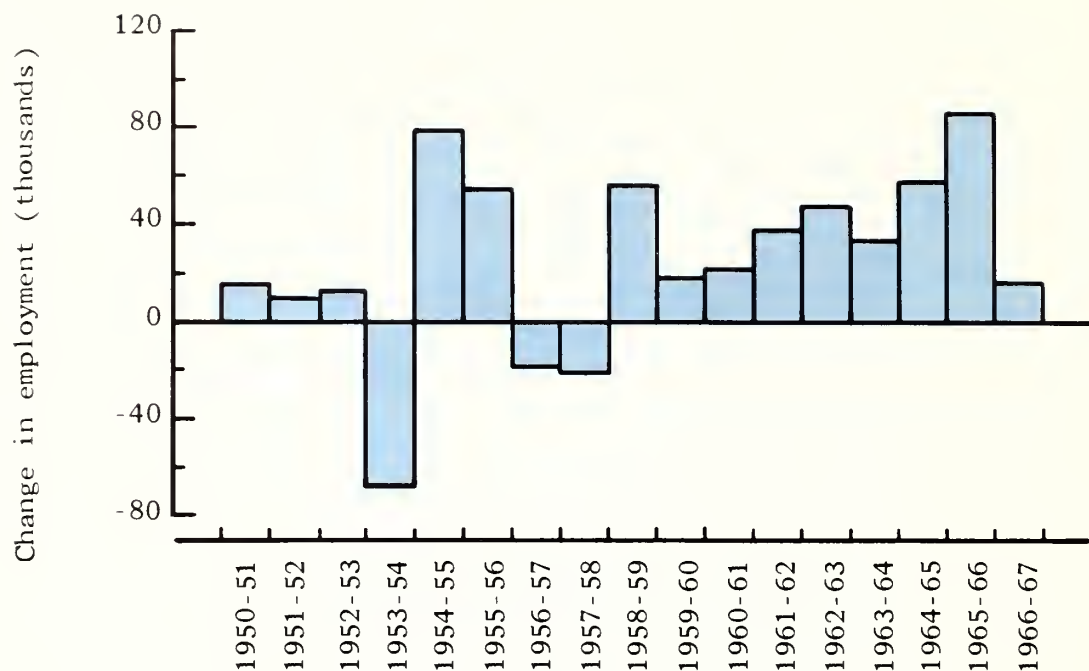


Figure 6. Annual Change in Total Employment for North Carolina, 1950-67

Source: Bureau of Employment Security Research, North Carolina Employment Security Commission.

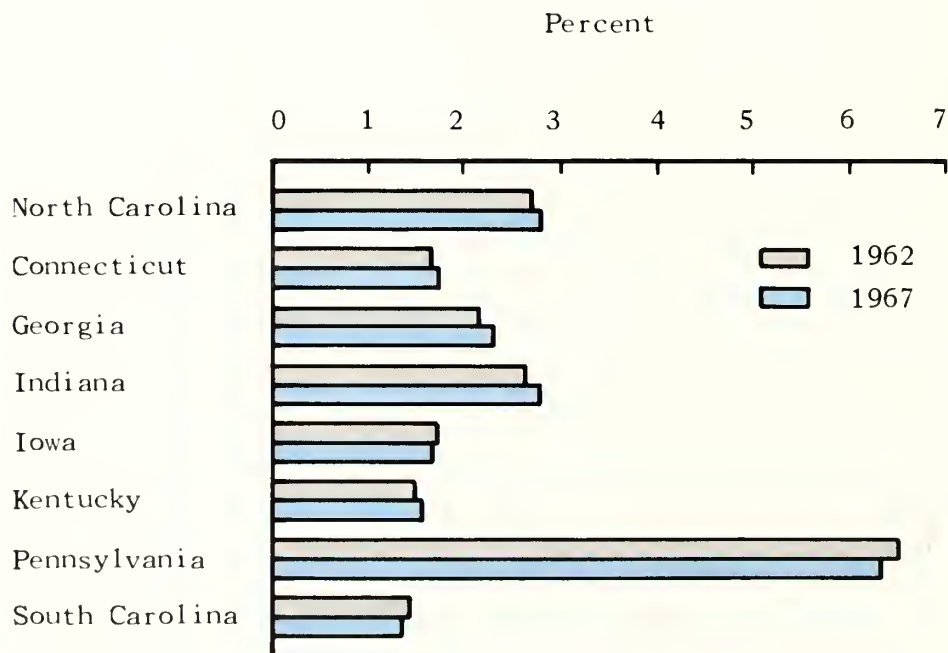


Figure 7. Percentage of the Nation's Employment in North Carolina and Selected States, 1962 and 1967.

Source: Estimated from data in *Manpower Report of the President*, U.S. Government Printing Office, Washington, D. C., April 1968.

family heads, and the elderly (Figure 9). The limited data available show that persons with these characteristics in North Carolina also are more likely to be unemployed.

Total unemployment figures do not take into account seasonal employment or underemployment. Both underemployment and seasonal unemployment tend to be heavy in agriculture and agriculturally related industries. The seasonal variation in employment in agriculture in North Carolina is much more pronounced than in the nation as a whole (Figure 10). Furthermore, a high percentage of the labor force in North Carolina is employed in farming. This likely explains in large part the fact that the State has greater seasonal variation in total employment than the nation as a whole (Figure 11).

Perhaps of even greater significance is the fact that much of the unemployment in rural areas is not reported, and therefore is not counted in the State estimates of unemployment. Studies conducted recently by the Employment Security Commission suggest that in some parts of the State unemployment in rural areas

amounts to as much as 16 percent of the labor force. The large amount of underemployment and seasonal unemployment of labor undoubtedly contributed to the relatively low productivity of labor and low incomes of people in North Carolina.

Another major factor that must be considered in assessing progress toward full employment is migration. A low unemployment rate is not a very good measure of economic progress if a substantial number of the people in the State must move to other states in search of jobs. During the 1950's, there was a net outmigration from North Carolina of more than 330,000 people. The net outmigration rate was about eight-tenths percent per year (Figure 12). Without this large outmigration, unemployment in North Carolina undoubtedly would have been much higher.

The data in Figure 12 indicate the striking difference in migration during the 1950's and the 1960's. As a consequence of the more widespread growth in employment opportunities throughout the United States during the 1960's there has been less incentive for people to migrate than there was during the 1950's.

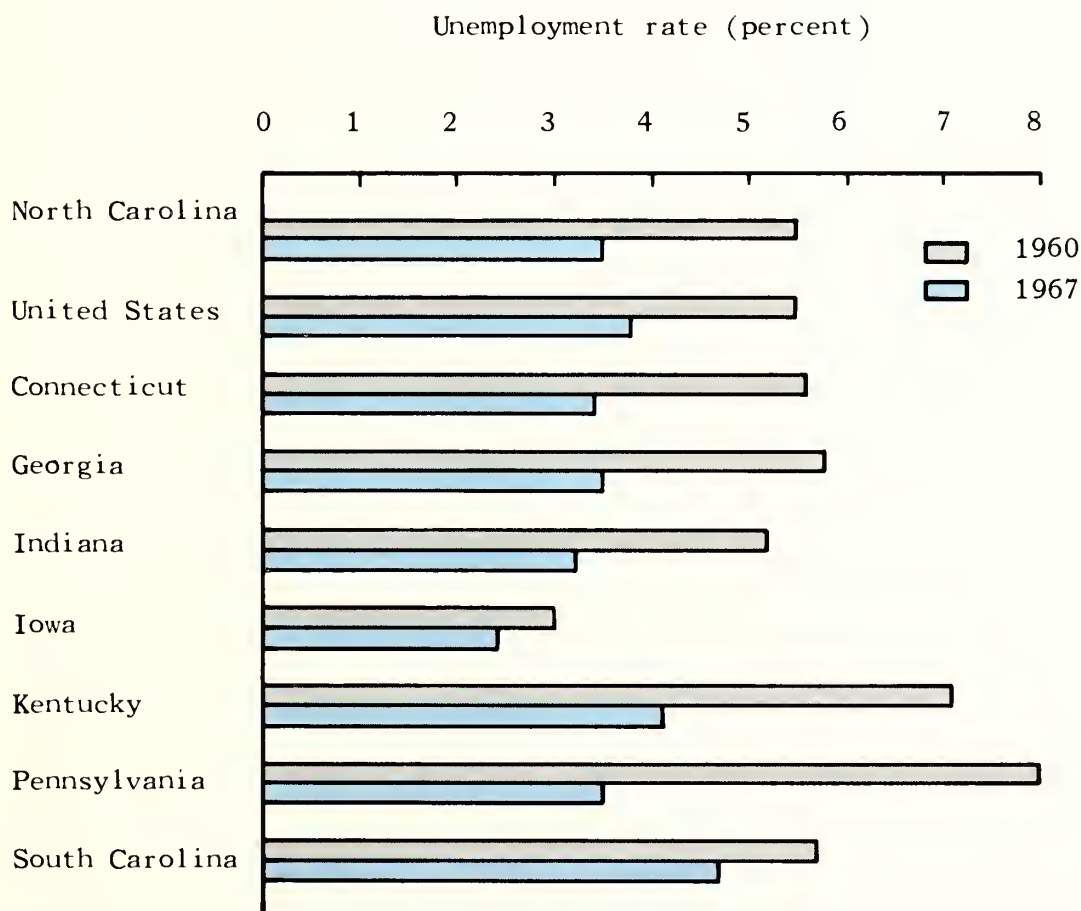


Figure 8. Annual Average Unemployment Rates for the United States and Selected States, 1960 and 1967.

Source: *Manpower Report of the President*, U. S. Government Printing Office, Washington, D. C., April 1968.

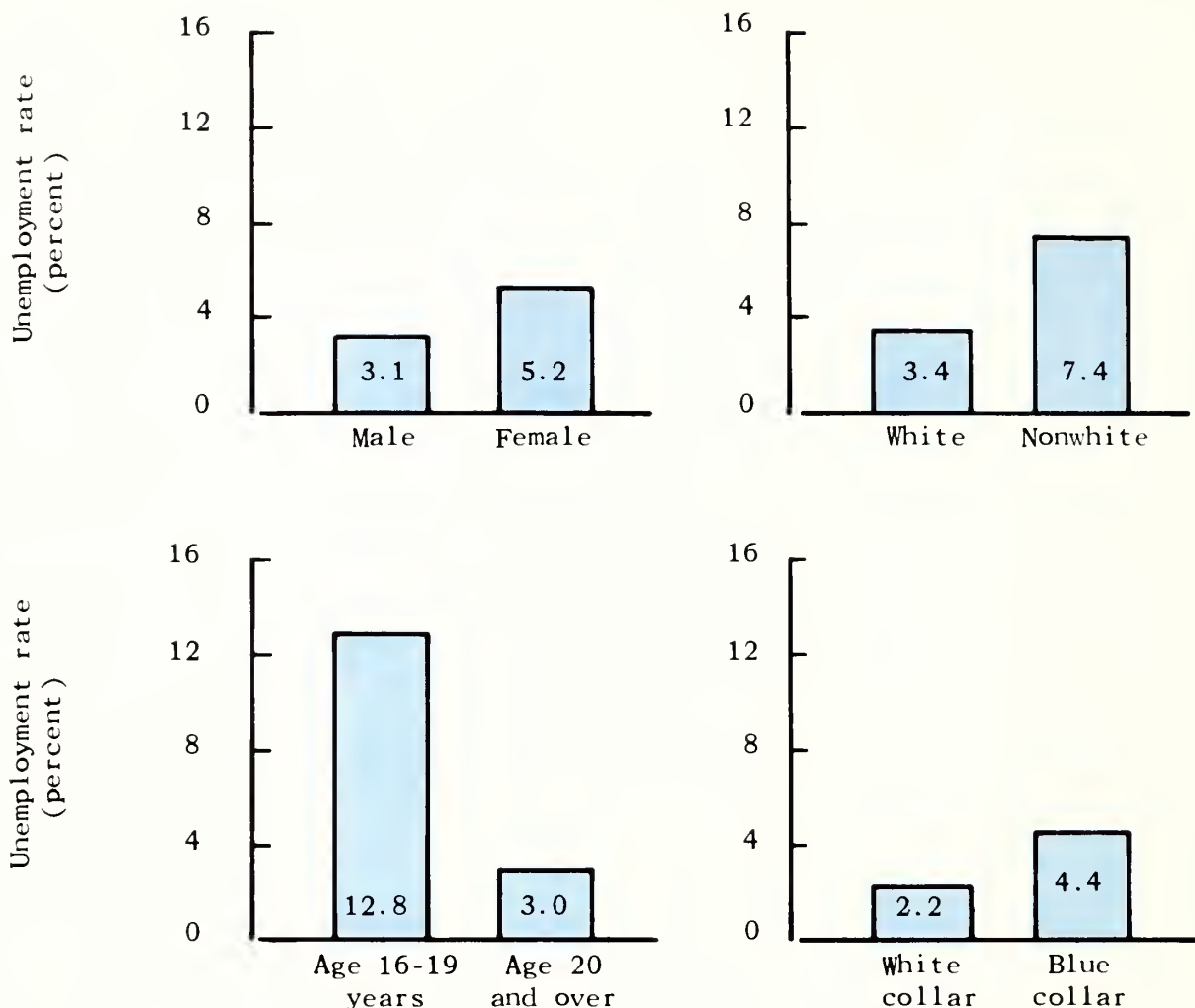


Figure 9. Unemployment Rates in the United States by Sex, Race, Age and Occupation, 1967

Source: *Manpower Report of the President*, U. S. Government Printing Office, Washington, D. C., April, 1968

In North Carolina the net outmigration rate has been reduced to less than one-half of one percent. Since 1964 net migration from the State probably has stopped. Georgia experienced a net immigration of people between 1960 and 1966, compared with a substantial net outmigration during the decade of the 1950's. Outmigration dropped sharply from all southern states included in this study. On the other hand, in spite of substantial increases in employment, outmigration from Iowa increased and Indiana changed from net immigration to net outmigration.

The incentive to migrate depends on the number of employment opportunities created relative to the number of persons entering the labor force and the earnings of labor in North Carolina in comparison with potential earnings in other states. Not all persons entering the labor force age group participated in the labor force. However, some measure of the pressure to migrate can be obtained by comparing the normal net

addition to the working age group (15-64) that would occur from persons reaching 15 years of age minus deaths and retirement without migration and the net change in employment. During the decade of the 1950's, employment in the United States increased by 72 for each 100 persons entering the working age group (Figure 13). However, there was large variation among the states in the extent to which they were able to create employment opportunities for those entering this group. Six states actually experienced a decrease in employment. These include the Dakotas, Arkansas, Mississippi, Kentucky and West Virginia. In contrast, Nevada, California and Florida experienced phenomenal increases in employment in relation to natural increases in the labor force. With the exception of Florida, all of the southeastern states performed poorly. North Carolina created employment for only 25 of each 100 persons entering working age during this decade. There was, therefore, substantial pressure

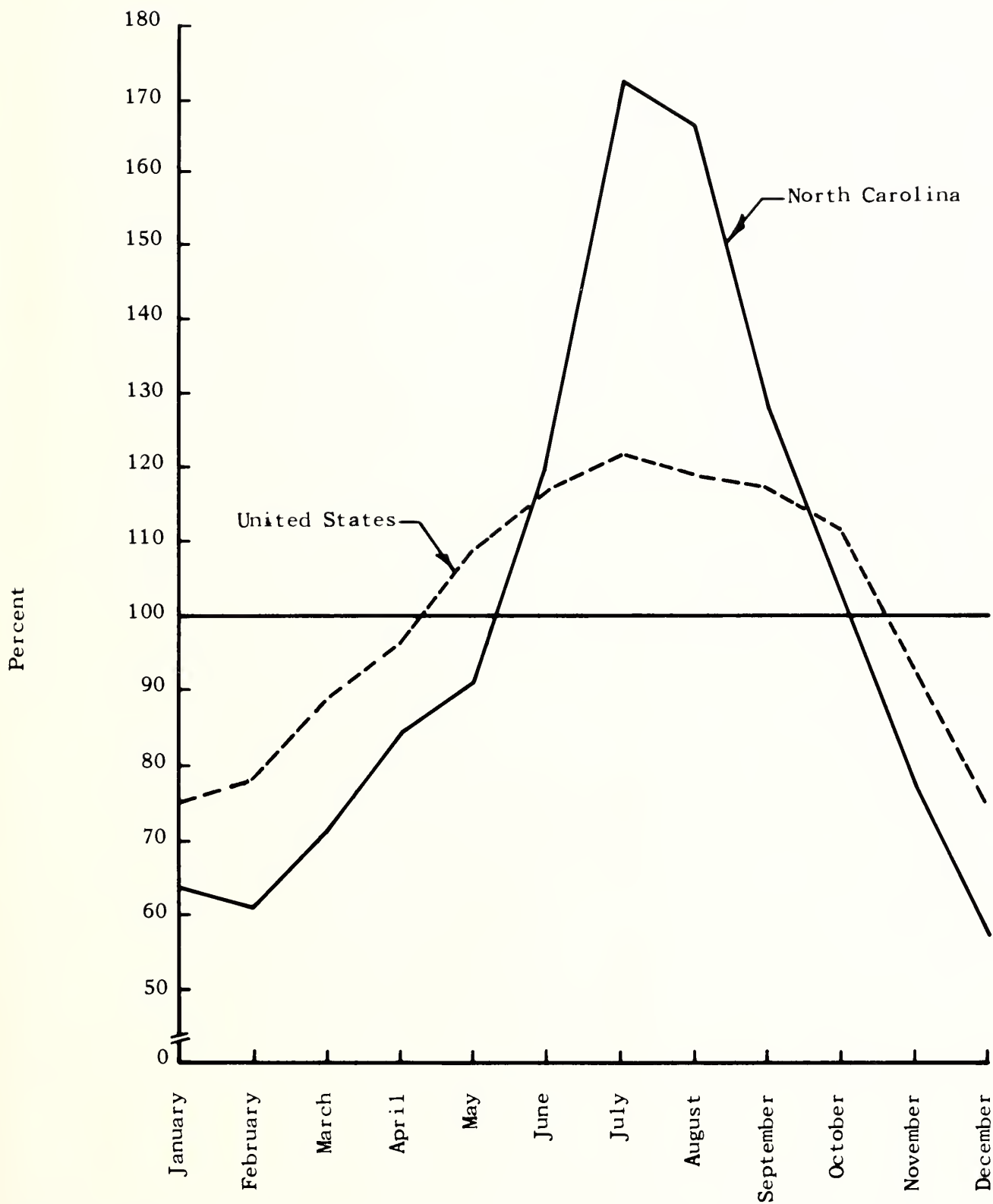


Figure 10. Percent of Annual Average Workers on Farms by Month, North Carolina and the United States, 1967

Source: *Farm Labor*, Statistical Reporting Service, USDA, March 11, 1968, p. 5.

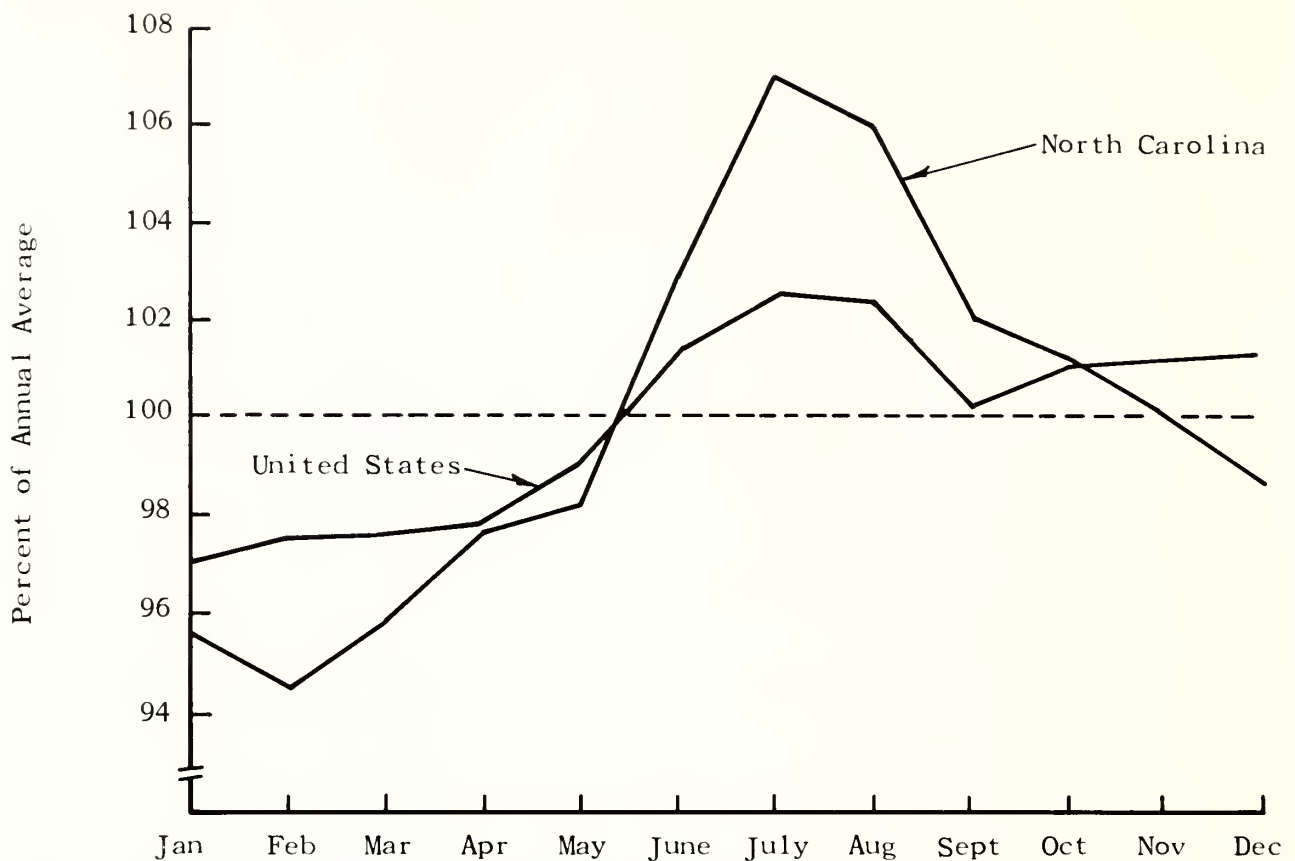


Figure 11. Monthly Employment as a Percent of Annual Average Total Employment, North Carolina and the United States, 1967.

Source: *Employment and Earnings*, February 1968; and tabulations from North Carolina Employment Security Commission.

for North Carolinians to migrate to other states in search of employment.

The situation during the 1960's has been strikingly different. Between 1962 and 1966, the United States created employment for 76 of each 100 persons entering the working age group (Figure 14). The gains in employment were widespread among the states. Progress in the southern states was quite pronounced. Performance in Tennessee and Georgia exceeded the national average. Virginia and North Carolina performed at a rate slightly less than the national average. During this period, decreases in employment occurred only in the northern part of the Great Plains.

The extent to which a state can increase its employment is affected by many things. The rate of growth of employment varies substantially among industries. As consumer income increases the products of some industries experience large increases in demand. Other industries find that increases in income are reflected in only small increases in the demand for their products. Technological change also has different impacts upon employment in different industries. Competition from other states and from foreign countries also affects

the ability of a state to expand employment in a particular industry. All of these and other factors affect the rate of growth of industries and the ability to expand employment in a state.

There has been a pronounced decrease in employment in agriculture in North Carolina, with employment decreasing from an annual average of 590,000 in 1950 to 288,000 in 1967. Much of this decrease was due to technological change and to increased productivity of labor on North Carolina farms. During the same period, employment in manufacturing increased from 418,300 to approximately 657,000 (Figure 15). Other nonagricultural employment increased more rapidly than manufacturing, and rose from 493,100 in 1950 to 916,000 in 1967.

North Carolina's employment is heavily weighted by agriculture, textiles and apparel, lumber and wood products, tobacco, food processing, and furniture and fixtures. All of these industries are growing nationally at a slow rate. Each of them has a smaller share of the nation's total employment now than it did in 1950. Some actually have fewer employees than in 1950. In order to increase employment in these industries, it

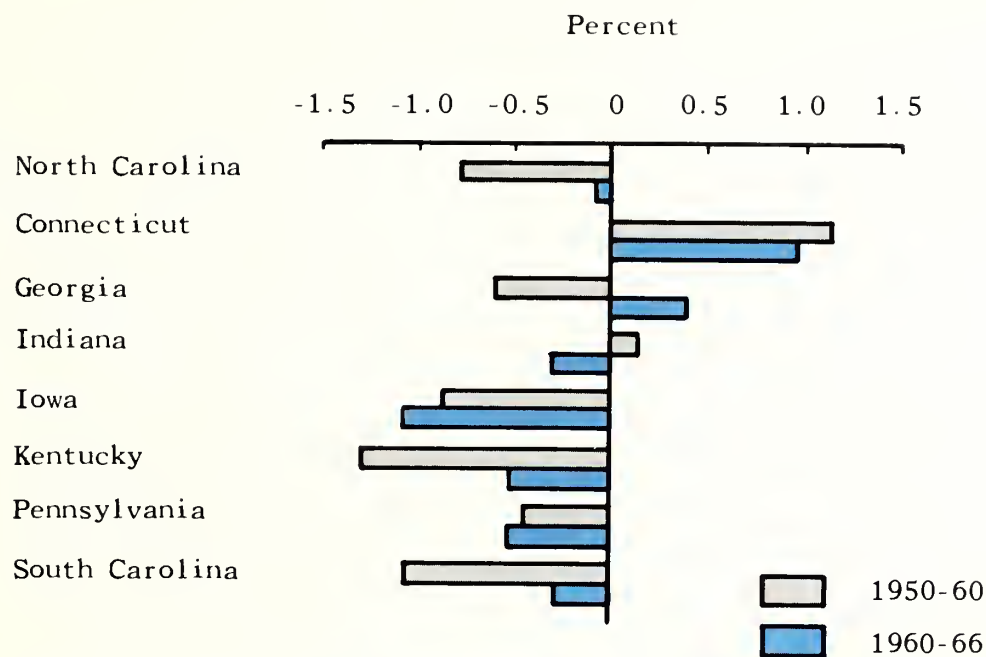


Figure 12. Annual Average Net Migration Rates for North Carolina and Selected States, 1950-60 and 1960-66

Source: *Population Estimates, Current Population Reports*, Bureau of the Census, U. S. Department of Commerce, Series P-25, No. 247, p. 4; and No. 380, p. 10

has been necessary for North Carolina to increase its share of the national employment in them.

In 1950, only 27 percent of the nonagricultural employment in North Carolina was in industries that grew more rapidly than the national average between 1950 and 1967 (Figure 16). In 1967 the percentage of employment in industries growing more rapidly than the national average of all industries increased to 35. In 1950 almost 35 percent of the nonagricultural employment in North Carolina was in industries that were declining in employment at the national level. By 1967, the percentage of employment in North Carolina in industries that were declining at the national level had been reduced to 24. Even so, in comparison with other states, employment in North Carolina is still heavily weighted by industries in which employment at the national level is growing slowly, if at all. This is emphasized by the fact that in 1967 the percentage of North Carolina's employment in the rapidly growing industries was less than the percentage of the United States employment in these industries in 1950.

Although some of the major industries in North Carolina are growing slowly, if at all, at the national level, they are expanding in North Carolina. Therefore, the State now has a greater share of the national employment in these industries than it had in 1950. In other words, the State is making gains on the rest of the nation in competing for employment in its major

industries.

North Carolina has encountered much more difficulty in increasing employment in the professions and in the service industries than in manufacturing. Accordingly, the State's share of the nation's employment in the service industries now is only slightly higher than it was in 1950.

A research project initiated by the Office of Business Economics, U. S. Department of Commerce, explains changes in employment by states in terms of, 1) growth in the overall national economy, 2) difference in the industry mix in the state and the nation and, 3) the performance of industries in a state as measured by changes in the state's share of national employment. These three factors are referred to as the *National Growth Effect*, the *Industry Mix Effect*, and the *Share Effect*.

The national growth effect indicates how much employment would have changed during a given period if employment in each industry in the state had changed at the same rate as the average of all industries in the nation. The industry mix effect shows how much employment the state either gained or lost as a result of an industry mix in the state that is different from that of the nation. The share effect indicates the change in employment in a state attributable to the ability of that state to increase its share of national employment. An increasing state share of national

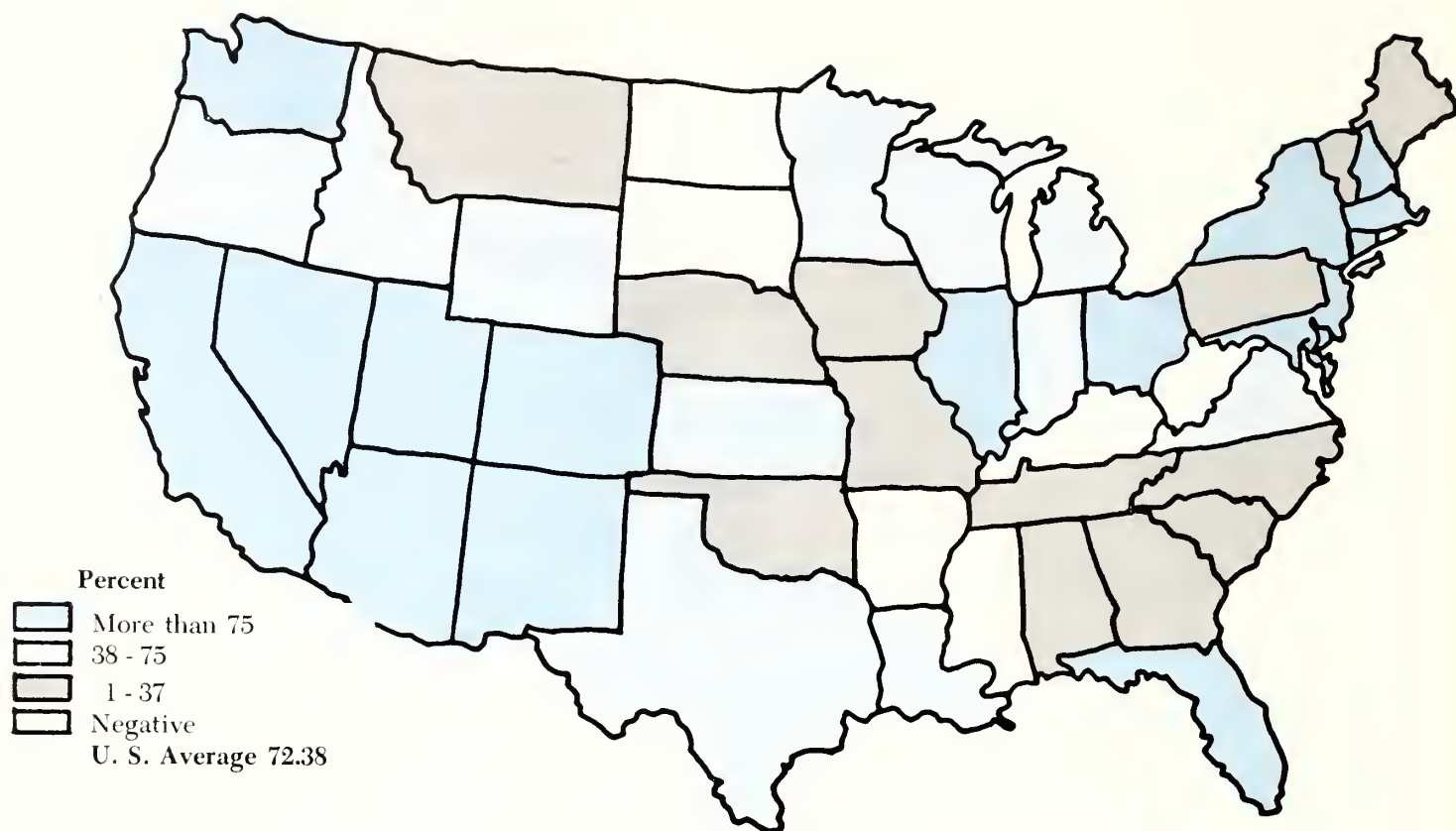


Figure 13. Change in Civilian Employment as Percent of Change in Potential Population of Working Age for Period 1950-60

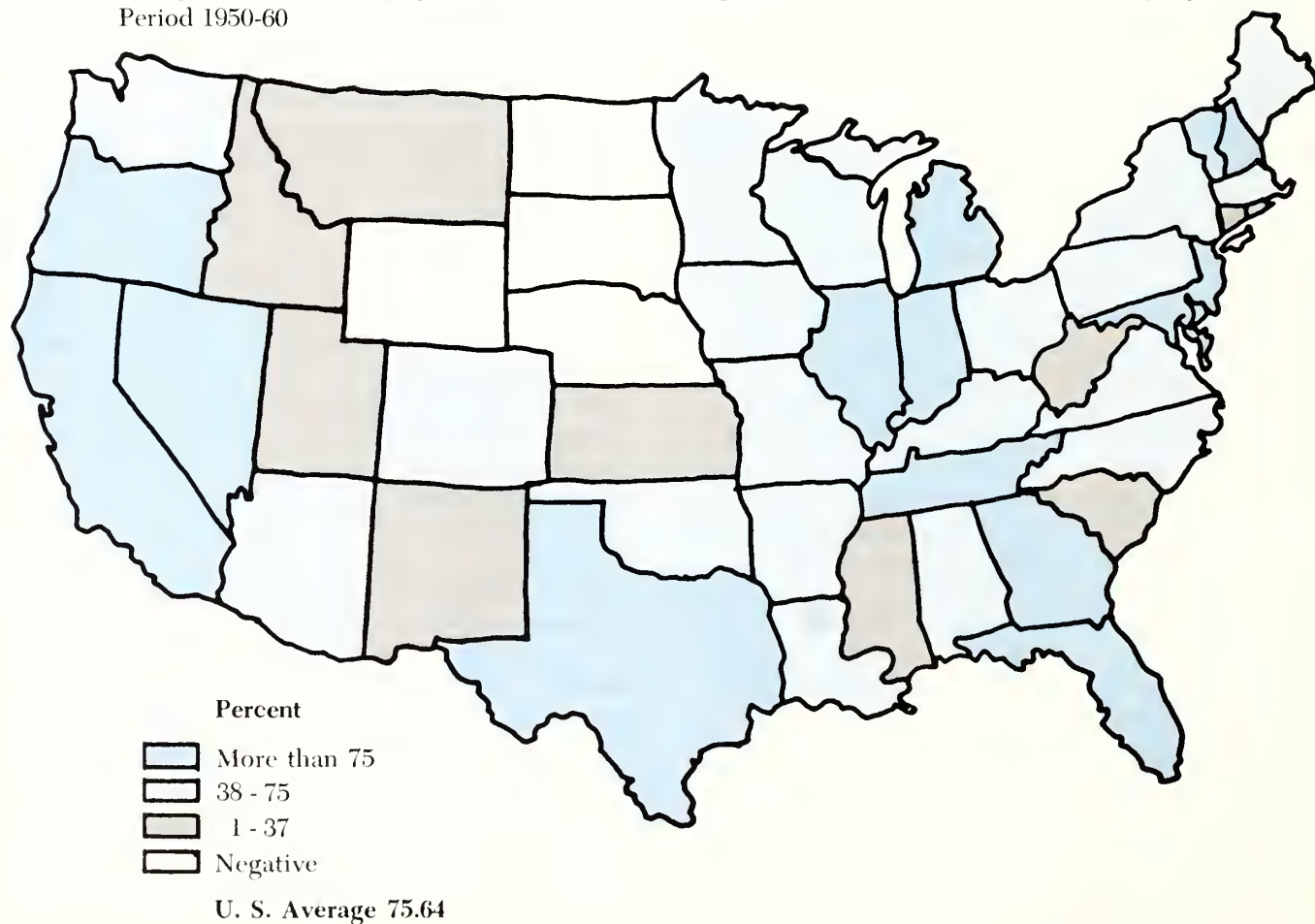


Figure 14. Change in Civilian Employment as Percent of Change in Potential Population of Working Age for Period 1962-1966

employment means that jobs within industries in that state are increasing more rapidly than in other states.

Employment growth in a state is a combination of these three factors. This kind of analysis shows the importance of a high rate of national growth to a state. It also shows the importance of an industry mix that is weighted in favor of growth industries. Employment gains in a state resulting from an increased share require that conditions in the state be more favorable

for employment growth than in other states.

Using this technique, the analysis of employment change in North Carolina shows that between 1950 and 1960 North Carolina would have had an increase of 185,000 in employment as a result of national growth. (Table 1). The fact that our industry mix is heavily weighted with slow growth industries reduced this growth by 6000 jobs. On the other hand, favorable conditions for expansion of employment in North

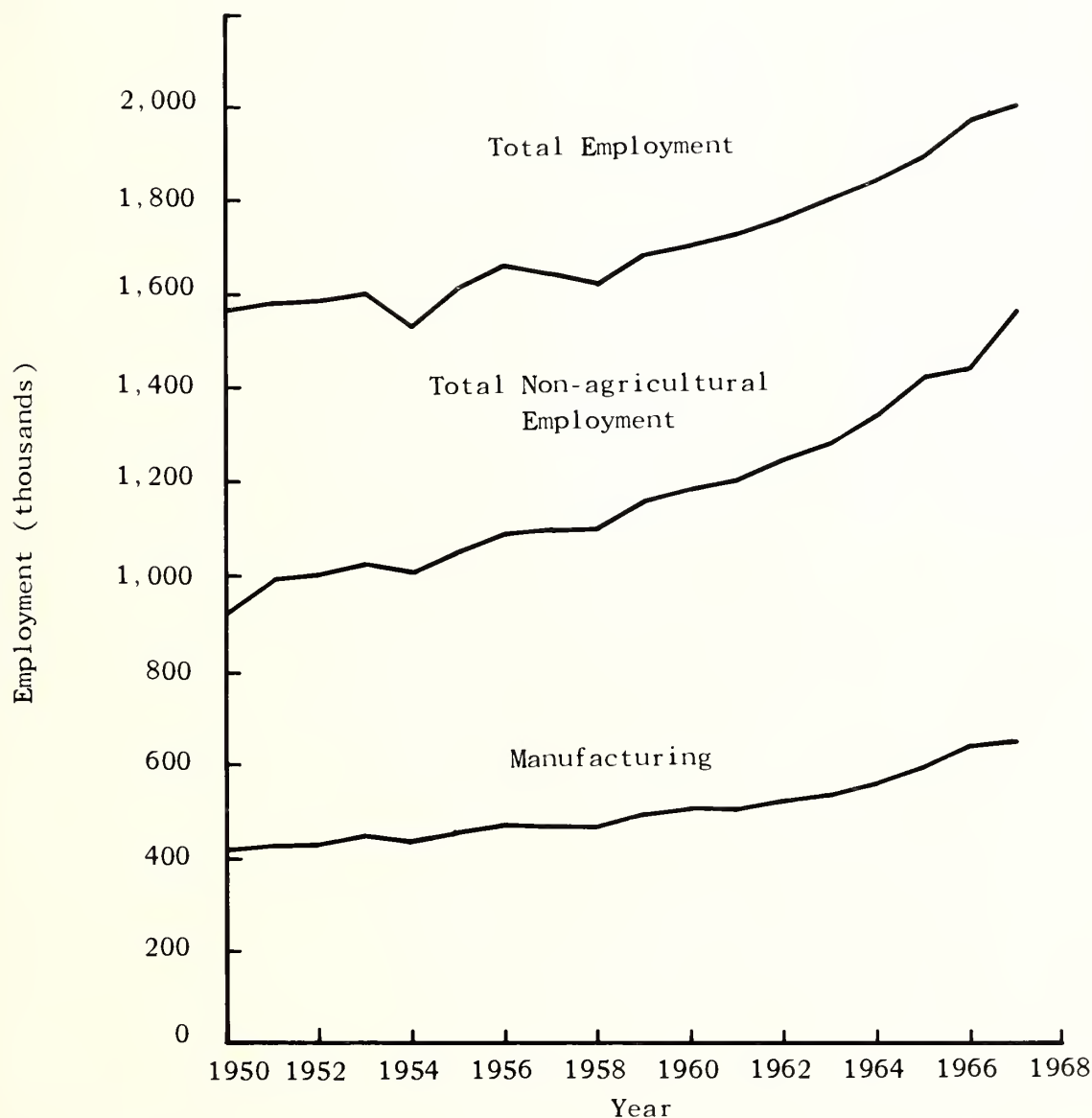


Figure 15. Total, Non-agricultural, and Manufacturing Employment, North Carolina, 1950-67

Source: Bureau of Employment Security Research, N. C. Employment Security Commission; and N. C. Department of Labor.

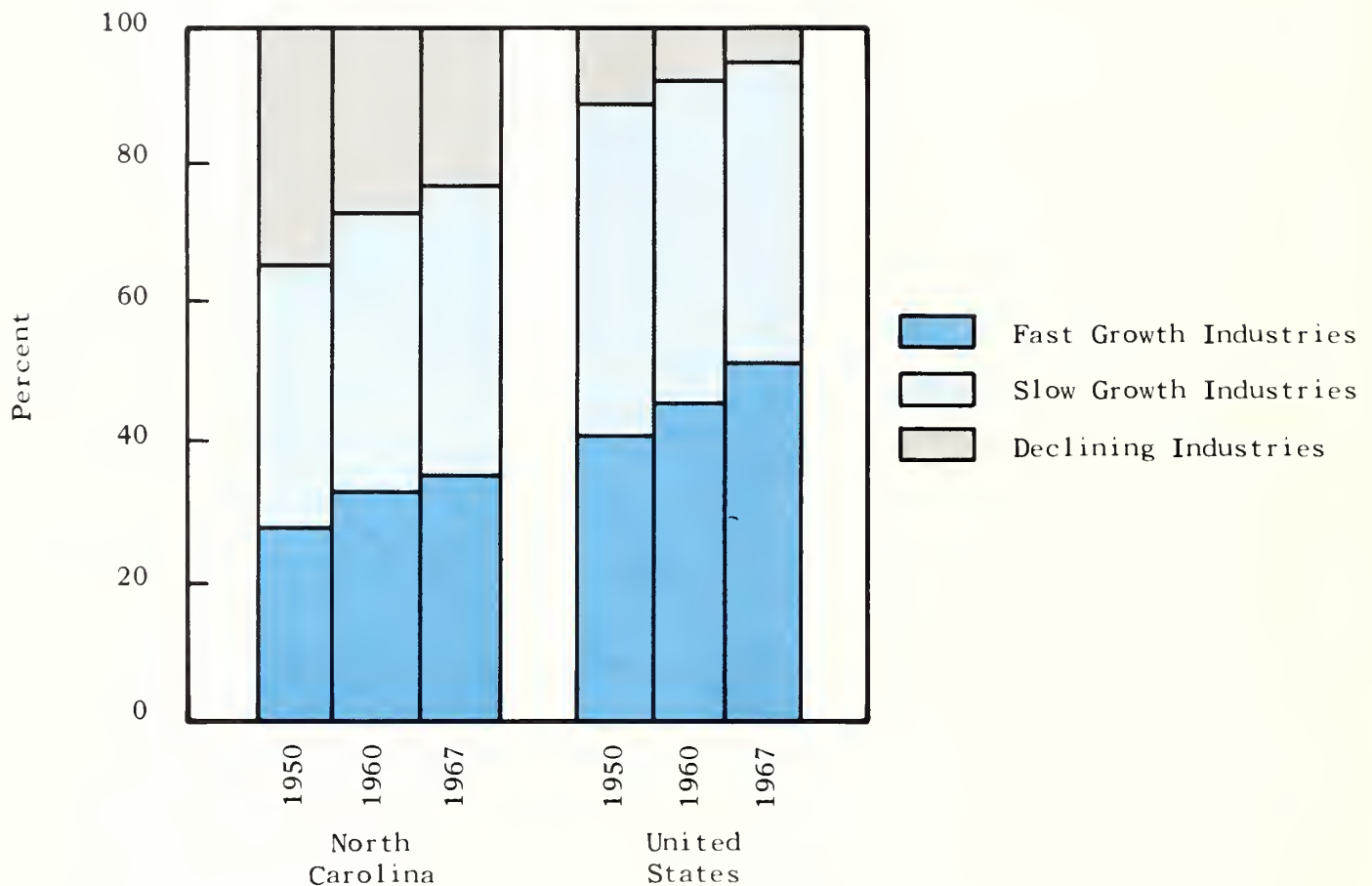


Figure 16. Percentage of Total Nonagricultural Employment in Industries Grouped According to National Growth Characteristics, North Carolina and the United States, 1950, 1960 and 1967

Source: *Employment and Earnings Statistics for States and Areas, 1939-66; Employment and Earnings and Monthly Report on the Labor Force*, March, 1968; both from Bureau of Labor Statistics, U. S. Department of Labor, and Tabulation from North Carolina Department of Labor. Fast Growth Industries are those in which employment increased more rapidly than the National Average between 1950 and 1967.

Carolina industries added 89,000 jobs through an increase in the State's share of national employment. The net result was an overall increase of 268,000 in employment.

Five of the states included in the study, the Carolinas, Connecticut, Georgia and Kentucky increased their share of employment in the industries located in

the respective states between 1950 and 1960. Between 1960 and 1966, these states continued to increase their share of national employment, and Indiana changed from a state with a decreasing share to an increasing share. Georgia had positive industry mix and state share effects throughout the period 1950-67, while Pennsylvania experienced negative industry mix and

Table 1. Change in Nonagricultural Employment, by Source of Change, North Carolina and Selected States, 1950-66

State	Total Change in Employment	Source of Change in Employment		
		National Growth	Industry Mix	State Share
(Thousands)				
<i>1950-60</i>				
North Carolina	267.7	184.9	— 5.9	88.7
Connecticut	150.7	152.7	—13.8	11.8
Georgia	244.5	160.8	3.9	79.8
Indiana	159.0	253.9	—29.4	—64.9
Iowa	71.4	121.6	10.8	—61.0
Kentucky	97.0	110.9	—17.8	3.9
Pennsylvania	69.6	726.0	—112.7	—543.7
South Carolina	121.1	91.8	— 2.3	31.6
<i><u>1960-66</u></i>				
North Carolina	306.3	214.8	— 3.3	94.8
Connecticut	177.9	164.8	—15.8	28.9
Georgia	271.7	188.9	2.5	80.3
Indiana	298.6	257.2	—10.0	51.4
Iowa	126.3	122.3	3.2	0.8
Kentucky	145.9	117.5	— 6.3	34.7
Pennsylvania	356.4	667.4	—28.0	—283.0
South Carolina	151.8	104.9	0.4	46.5

state share effects throughout the period.

Information in Table 2 shows the significance of the three sources of employment growth for major industry groups in North Carolina for the period 1950 to 1967. Striking differences can be noted. During the earlier decade the State did not maintain its share of employment in the service industries. This factor resulted in a decrease of approximately 10,000 in employment in the service industries below what otherwise might have been expected. This was more than offset, however, by strong growth trends at the national level and a favorable industry mix effect. On balance, therefore, employment in the service industries increased in North Carolina.

During the period 1960-1967, North Carolina did not do well in terms of its share of employment in transportation and public utilities and government. In spite of this, the strong national trend for expanded employment in these industries and a favorable industry mix resulted in a substantial net increase in employment in North Carolina. The large increase in employment in manufacturing was made possible by a strong national expansion in employment in manufacturing and a favorable competitive performance of the manufacturing industries located in the State.

The industry mix in the State is important in still another respect. Changes in the industrial structure are reflected in the occupational structure. Some industries are more heavily weighted with high paying occupations than others. Improvements in the industry

mix, therefore, may result in a better occupational structure and higher incomes.

Although current data are not available for employment by occupational category, the data that are available indicate a substantial shift in the occupational structure of employment in North Carolina between 1950 and 1960 (Figure 17). During the period from 1950 to 1960 the percentage of the labor force in North Carolina employed in white-collar occupations increased about one-fourth while the percentage of the labor force employed in agricultural occupations decreased from 24 percent to 12 percent. Nevertheless, the State still depends heavily upon agriculture and blue-collar occupations. The percentage of employment in white-collar occupations is substantially less in North Carolina than for the nation as a whole. Since the occupational structure in the State is related to the industry mix, improvements in the industry mix likely will be necessary to achieve a better occupational structure.

In summary, there is relatively little unemployment in North Carolina. Employment has expanded rapidly during the 1960's, and net migration from the State has virtually stopped. In 1967, employment in North Carolina was 17.7 percent greater than in 1960 while population was only 10.3 percent greater. Although employment in North Carolina still is heavily weighted with industries that are growing slowly if at all at the national level, substantial improvement has occurred in the industry mix in recent years. Furthermore,

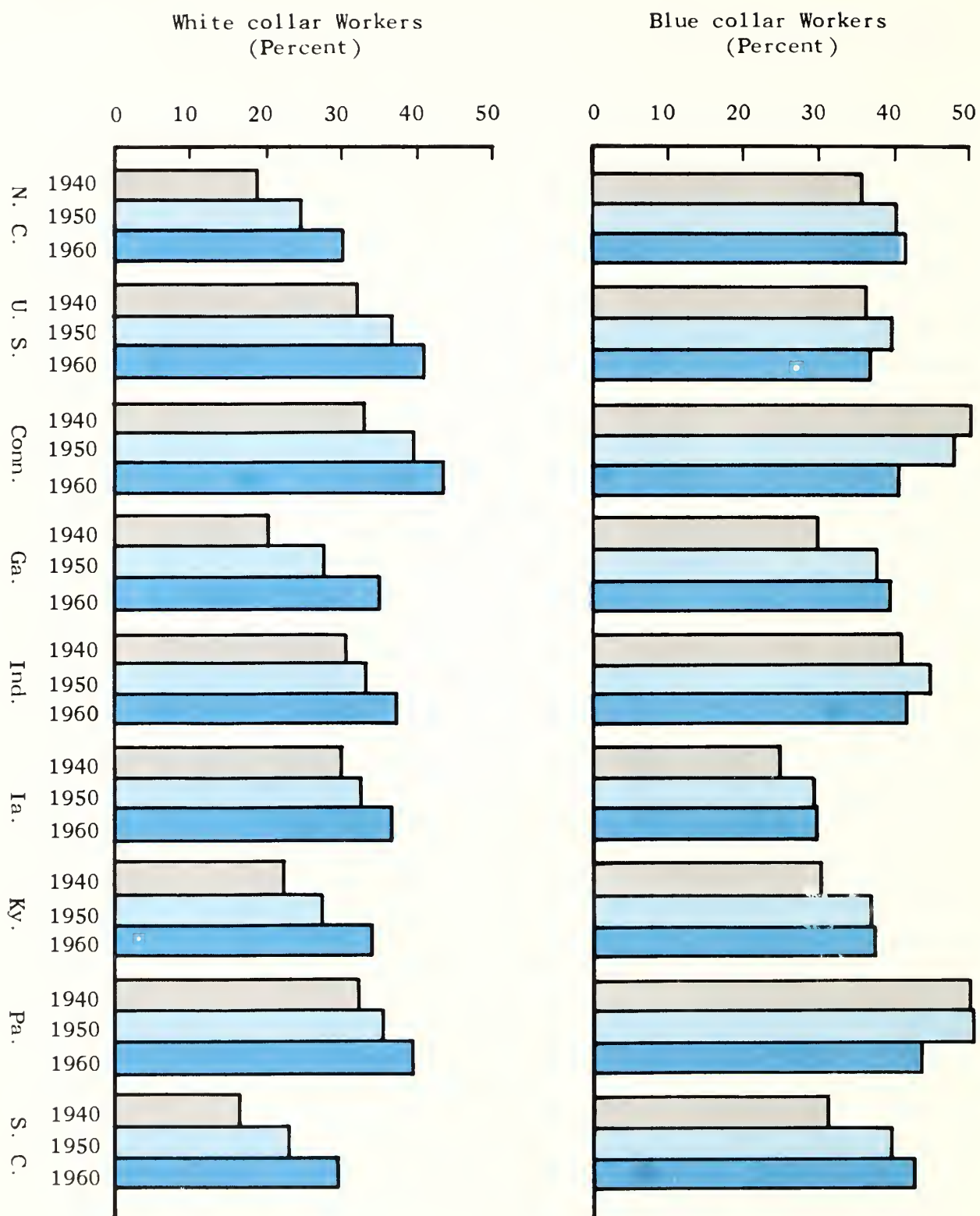


Figure 17. Percentage Distribution of Employment by Occupation for and Selected States, 1940, 1950 and 1960.

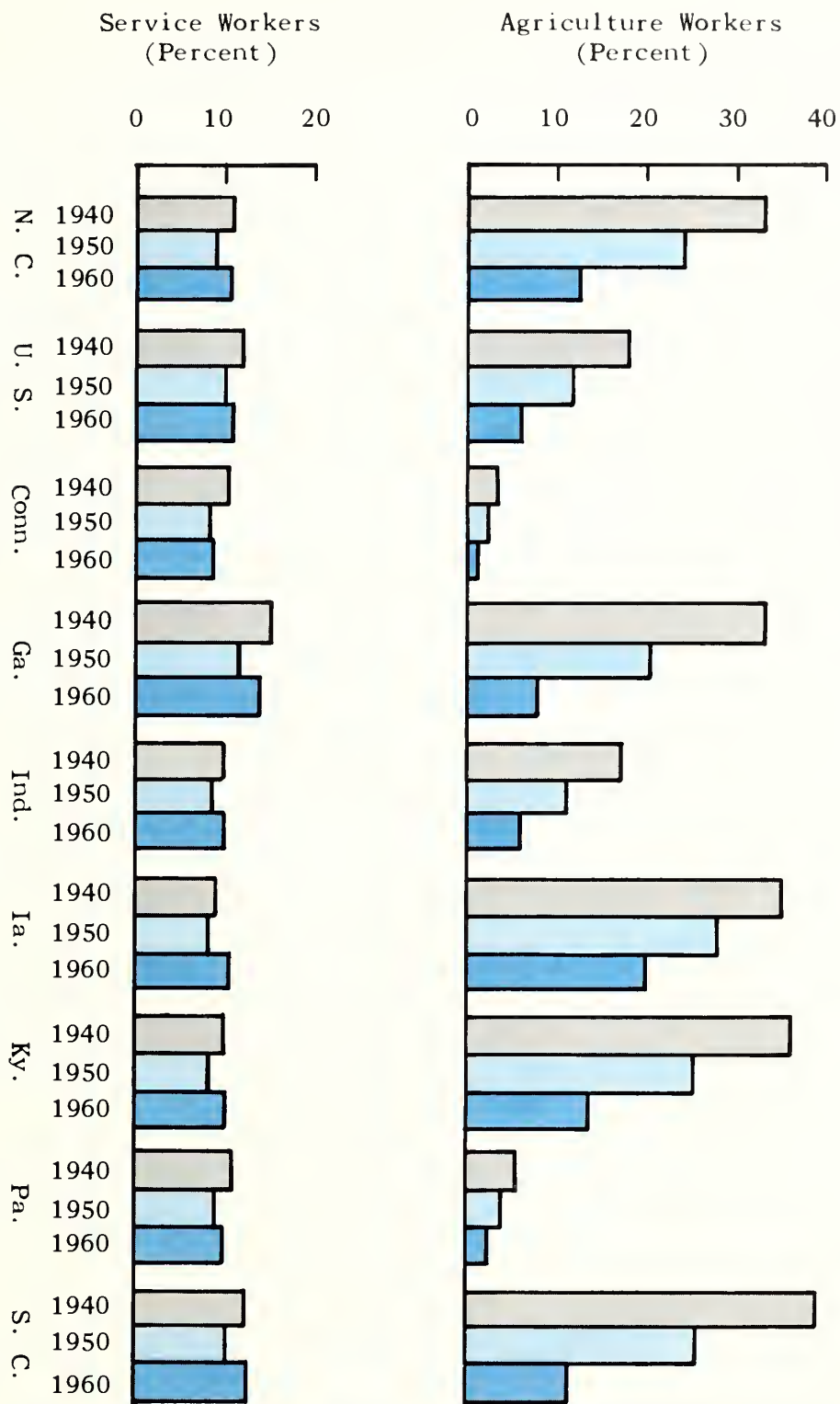


Figure 17. (Continued) Percentage Distribution of Employment by Occupation for United States and Selected States, 1940, 1950 and 1960.

Source: 1940, 1950 and 1960 Census of Population.

North Carolina apparently maintains a relatively favorably competitive position, and it is increasing its share of the nation's employment for the industries located in the State. Even so, it will be difficult to improve substantially the relative per capita income position of North Carolina without substantial changes in the industry mix and in the occupational structure.

Sources of Income in North Carolina

In this section the major sources of personal income in North Carolina and selected states will be examined. The objective is to show how the sources of income differ among states and to indicate the kinds of changes that are needed to achieve improvement in North Carolina's income position.

Since 1950 there have been substantial changes in the sources of personal income to North Carolinians. There has been a significant increase in the percentage of income received from wages and salaries (Figure 18). The share of income coming from property also has increased. On the other hand, the share of income to proprietors has decreased.

The percentage of income received by North Carolinians from wages and salaries exceeds that of the nation as a whole. Since 1950, the increase in the percentage share of personal income coming from

wages and salaries in North Carolina has been greater than for any of the states with which it is compared in this report.

The sharp decrease in the percentage of income to proprietors in North Carolina undoubtedly reflects the rapid change from farm to nonfarm employment and the change from small proprietorships to large corporate businesses in the State between 1950 and 1966. All states included in this study experienced a sharp reduction in the percentage of the income originating from farms (Figure 19). The proportion of participation income¹ from manufacturing in North Carolina is greater than the national average, and it is increasing. Income from nonfarm sources other than manufacturing also is increasing. During the 1960's the relative importance of this source of income increased only in North Carolina and Pennsylvania among the states shown in Figure 19. North Carolina and Kentucky are almost twice as dependent on farms for a source of income as is the nation as a whole. The relative contribution of farms to participation income is decreasing in all of the states included in the study except Iowa.

North Carolinians derive relatively little of their income from property. Since wages and salaries are a source of a high proportion of the income of the people of the State, in North Carolina as in other states, per capita income is affected greatly by the level of wages.

Table 2. Change in Nonagricultural Employment, by Source of Change and Major Industry Groups, North Carolina, 1950-67.

Industry Group	Total Change in Employment	Source of Change in Employment		
		National Growth	Industry Mix	State Share
(Thousands)				
<u>1950-60</u>				
All Nonagricultural	267.7	184.9	— 5.9	88.7
Mining	— 0.1	0.7	— 1.4	0.6
Contract Construction	17.2	9.6	1.8	5.8
Manufacturing	91.1	83.4	—40.6	48.3
Transportation and Public Utilities ...	9.5	11.0	—11.4	9.9
Wholesale and Retail Trade	50.9	33.6	2.4	14.9
Finance, Insurance, and Real Estate ..	18.8	4.6	4.)4	9.9
Service	27.6	19.8	17.9	— 10.1
Government	52.6	22.2	20.9	9.5
<u>1960-67</u>				
All Nonagricultural	377.3	260.7	—15.6	132.2
Mining	0.2	0.7	— 0.3	— 0.2
Contract Construction	25.7	14.2	— 5.1	16.6
Manufacturing	147.6	111.1	—79.3	116.2
Transportation and Public Utilities ...	17.4	14.1	27.5	—24.2
Wholesale and Retail Trade	62.8	47.9	— 3.9	18.8
Finance, Insurance, and Real Estate ..	17.2	9.2	— 0.4	8.4
Service	53.1	27.7	17.6	7.8
Government	52.9	35.8	28.3	—11.2

¹ Participation income is civilian income received by persons for participation in current production.

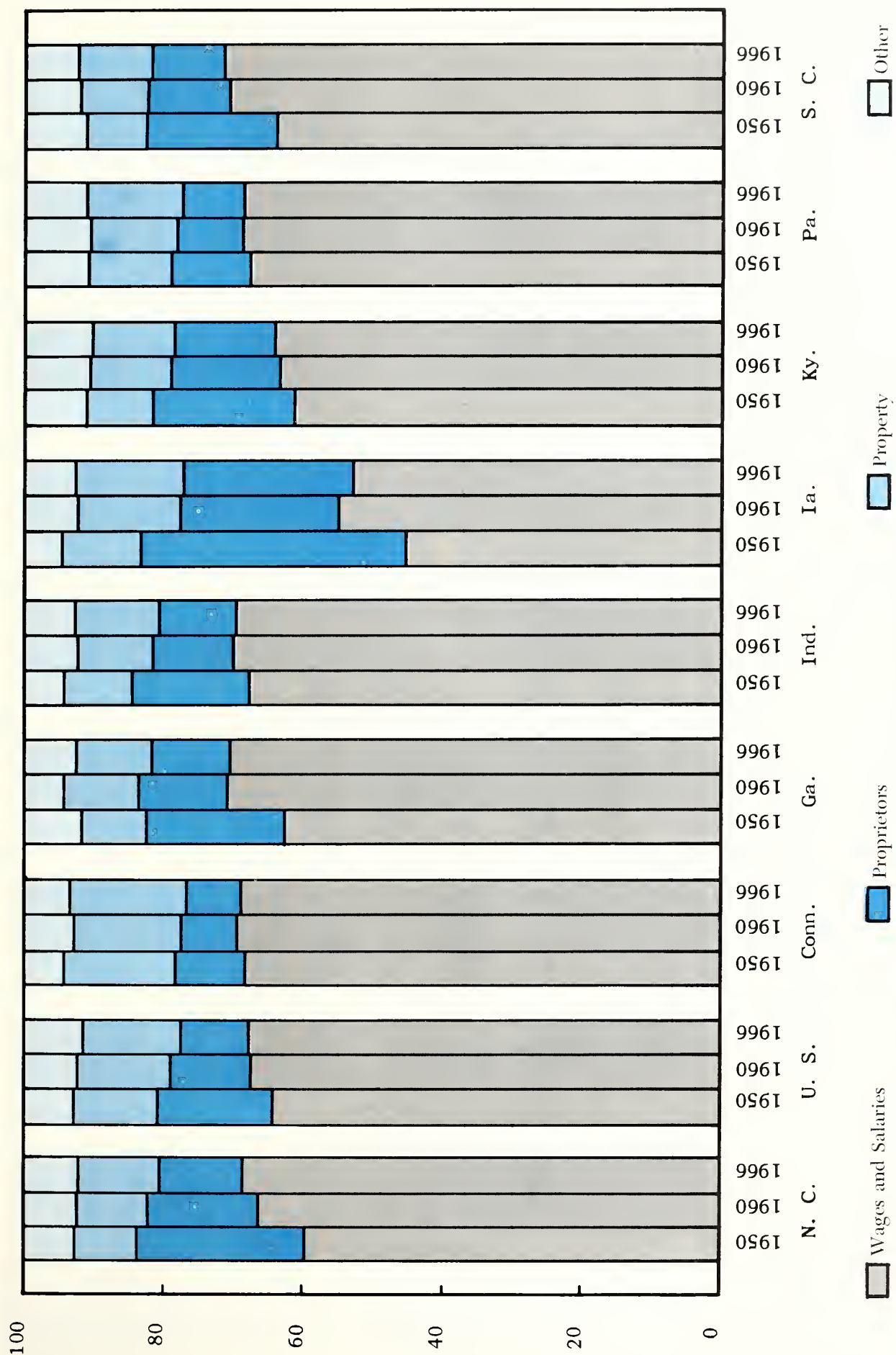


Figure 18. Personal Income by Major Source for United States and Selected States, 1950, 1960, and 1966
Source: Office of Business Economics, United States Department of Commerce

Percent of Participation Income

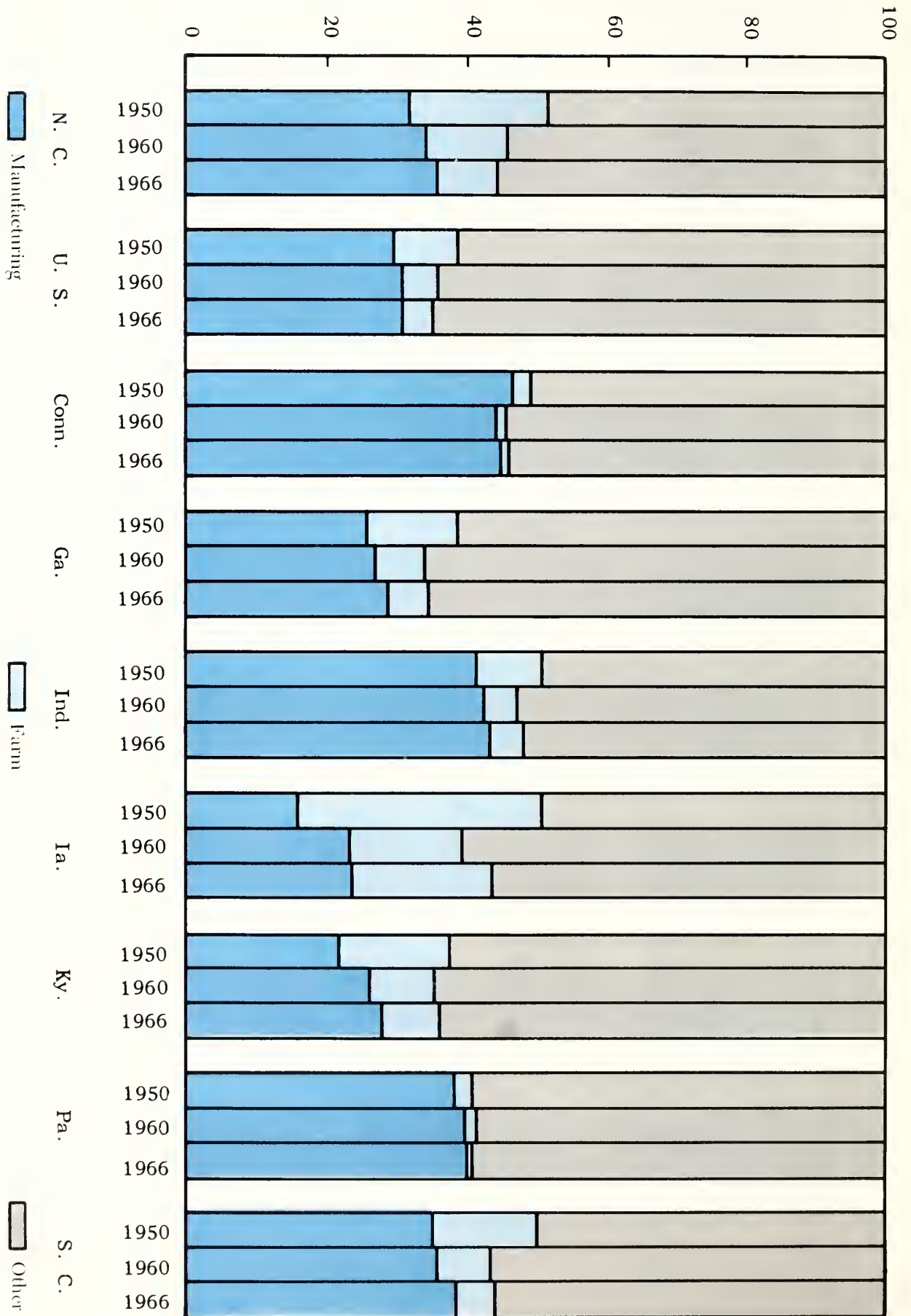


Figure 19. Percentage Distribution of Participation Income of the United States and Selected States, 1950, 1960 and 1966

Source: Office of Business Economics, U. S. Department of Commerce.

In 1967 North Carolina ranked 48 among the states in the average hourly earnings of production workers in manufacturing industries. The wage rate in North Carolina was lower than that of any other state included in this study (Figure 20).

The low wages of manufacturing workers in North Carolina probably reflect the large supply of low skill labor and the industrial mix in the State. A high proportion of the manufacturing employment in North Carolina is in industries that have relatively low wages in other states as well as in North Carolina.

The productivity of workers is related to the investment in equipment per production worker. The capital expenditure per production worker in North Carolina is substantially less than in the nation as a whole, and is less than for most other states included in this study (Table 3).

The average wage rate in North Carolina also is affected by employment conditions at the national

level. During the 1950's when the rate of growth of employment in both the United States and North Carolina was low relative to the potential increase in the supply of labor, the wage rate in North Carolina fell in relation to the national wage rate. In 1950, the average wage in North Carolina was 44 cents per hour less than the average national wage (in 1964 dollars). In 1960 the difference had increased to 76 cents per hour. Since 1964, the demand for labor has increased substantially and the wage in North Carolina has risen relative to the national wage, both on the average and for most industries. The recent increase in North Carolina's wage rate has been large enough to reverse the trend and to bring about a small reduction in the difference between average wages in North Carolina and at the national level. In terms of 1964 dollars, the difference between average wages in the United States and in North Carolina in 1967 was 74 cents per hour.

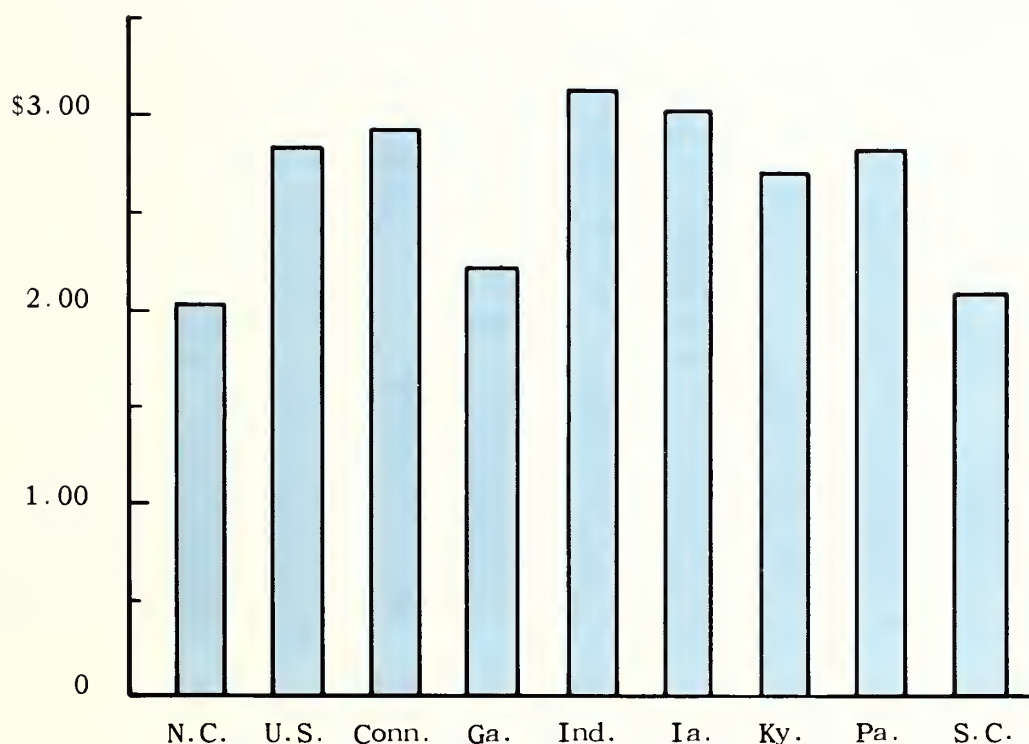


Figure 20. Average Hourly Earnings of Production Workers in Manufacturing in the United States and Selected States, 1967

Source: *Employment and Earnings and Monthly Report on the Labor Force*, Bureau of Labor Statistics, U. S. Department of Labor, April 1967 to March 1968, issues.

Table 3. Capital Expenditures per Production Worker in Manufacturing in the United States and Selected States, 1963 and 1964

Area	1963	1964
	(dollars)	
United States	932	1,081
North Carolina	663	799
Connecticut	724	764
Georgia	574	770
Indiana	1,162	1,912
Iowa	1,000	1,328
Kentucky	1,603	1,376
Pennsylvania	771	879
South Carolina	747	1,039

Source: Annual Survey of Manufacturers, 1963, 1964, Bureau of the Census, United States Department of Commerce

Improvement in the quality of employment in North Carolina should be reflected in further improvement in the wage rate. Between 1960 and 1967 approximately 377,000 net new jobs were created in North Carolina. The distribution of net new jobs by industry group is shown in Figure 21. Several points should be emphasized. First, for all of the industries shown except tobacco manufacturing and retail trade, North Carolina's wage is low relative to that of the nation. Second, the major expansion in employment in North Carolina is occurring in low-wage industries which have low wages both in North Carolina and in the nation as a whole. It is not reasonable to expect these industries to pay higher wages in North Carolina than elsewhere. Instead, increases in wages are more likely to be achieved through increasing worker productivity. Since there is large variation in wages paid among

industries, higher average wages also may result from improvement in the industry mix.

The Office of Business Economics, U. S. Department of Commerce, provided data indicating how much of the change in total personal income in the State could be attributed to national growth, industry mix and a change in share.

This analysis indicated that if income associated with each industry in North Carolina had increased between 1960 and 1967 at the same rate as the average of all industries in the nation, \$3.2 billion would have been added to personal income (Table 4). It showed that the industry mix in the State had a negative effect amounting to \$85 million. This negative effect was more than offset by a \$1 billion increase in the State's share of total personal income resulting from industries in the State increasing their share of total personal income.

Table 4. Change in Total Personal Income, by Source of Change, North Carolina and Selected States, 1960-1966

State	Total Change in Income	Source of Change in Income		
		National Growth	Industry Mix	State Share
North Carolina	4,179	3,256	- 85	1,008
Connecticut	3,483	3,254	69	160
Georgia	4,090	2,958	- 42	1,174
Indiana	5,005	4,661	- 15	359
Iowa	2,783	2,496	- 97	384
Kentucky	2,351	2,184	- 36	203
Pennsylvania	9,039	11,576	140	-2,677
South Carolina	2,012	1,503	- 14	523

Source: Regional Economics Division, Office of Business Economics, U. S. Department of Commerce

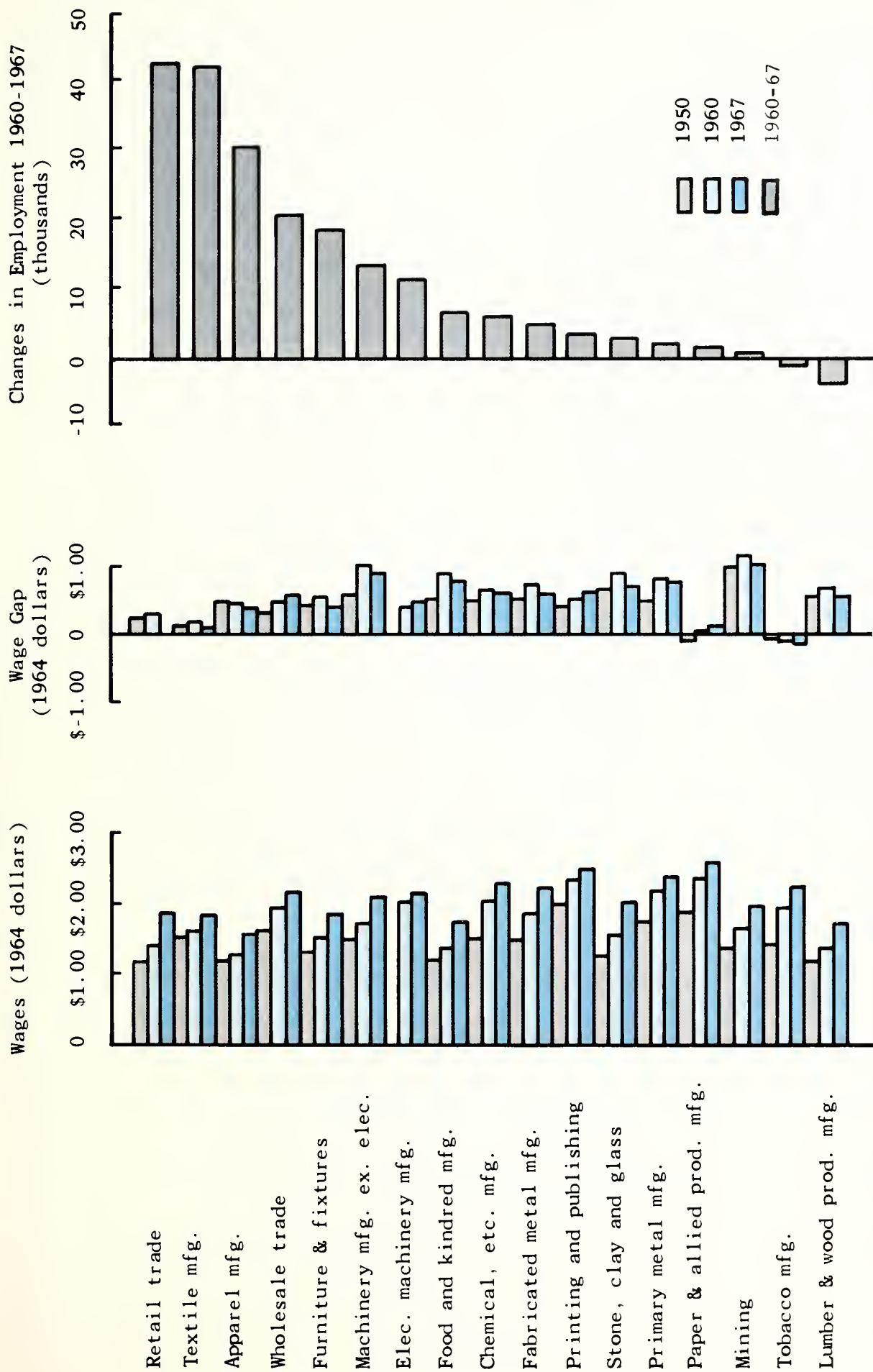


Figure 21. Wages, Wage Gaps, and Change in Employment for North Carolina

Sources: Bureau of Labor Statistics, U.S. Dept. of Labor; and North Carolina Dept. of Labor.

The increase in personal income resulting from an increase in the state share was greater for North Carolina than for any state included in the study except Georgia. The fact that Pennsylvania was unable to maintain its competitive position meant that its income was \$2.7 billion less than it would have been. Of the states included in the study only Connecticut experienced positive changes from both industry mix and state share.

It should be noted that all of the states included in this study, except Pennsylvania and Connecticut, have an industry mix that is unfavorable to rapid growth in income. However, all of the states except Pennsylvania have been able to improve the state share since 1960. Improvement in the three southeastern states has been most pronounced.

In summary, it has been shown that during the 1960's, when the demand for labor increased substantially, the wage rate in North Carolina increased relative to that in other states and the gap between wages in North Carolina and the nation at large declined. Changes in the industry mix in North Carolina are bringing about significant changes in the sources of income to North Carolinians. Income from wages and salaries is increasing more rapidly than income from other sources. If North Carolinians are to improve substantially their per capita income position, greater progress must be made in improving wages in the State relative to wages in other states, or means must be found for improving the share of income derived from property. The latter choice is not very promising. The fact that such a small proportion of the income is derived from property probably reflects the low income position of the people. Many people in the State derive all of their income from wages and salaries. For these people, an improvement in wages is the only hope of achieving higher per capita income.

Income Distribution

In the preceding sections, it has been pointed out that there is extensive underemployment of labor in North Carolina and that a high proportion of those who are employed earn low wages. Accordingly, a high percentage of the people in North Carolina have low incomes. Although real progress was made in reducing the percentage of the population in the low income groups during the 1950's, a high proportion of the population in the State still had low incomes in 1959. About 37 percent of the families in the State received an income of less than \$3,000. Only 6.9 percent received an income of \$10,000 or more. The income distribution for North Carolina is compared with that of Connecticut and the United States in Figure 22. The contrast between North Carolina and Connecticut is striking indeed.

A study in 1967 measured the concentration of pre-

tax money incomes of families by states.¹ Income concentration ratios were computed which permit states to be compared in terms of differences in income distribution. The income concentration ratios show the extent to which income distribution departs from an equal distribution among families. A ratio of zero indicates that all families have the same income. At the other extreme, a ratio of one indicates that income is concentrated in the hands of a very few people. The concentration ratios for North Carolina and the other states with which it is compared in this study are shown in Figure 23.

It should be noted that the southern states, which have low per capita incomes, also have greater concentration of income than the other states. Connecticut, Indiana, Iowa and Pennsylvania have relatively high per capita income and their income is more evenly distributed among the people. Normally, an increase in real per capita income is accompanied by a decrease in concentration of income among the people.

During the 1950's there was significant reduction in concentration in income distribution in North Carolina and in all of the states included in this study. The reduction was greatest in Georgia and South Carolina.

Income distribution data are not available since 1960. It is quite likely that recent progress in job creation and improvement in returns for labor in North Carolina have resulted in improvement in income distribution. Per capita income in the State remains low, however, and it is doubtful that North Carolina has improved its income distribution significantly relative to other states. Furthermore, it is quite clear that the low income problems in this State have not been removed. Deprived conditions are evident in poor housing, poor education, poor health, and in a high percentage of the population in need of public assistance. There is a clear and evident need to improve the income of a high proportion of the families of North Carolina.

Geographic Distribution of Economic Growth

North Carolina is much better off than most states in terms of the geographic distribution of its economic growth. Although there has been a pronounced tendency throughout the United States for economic activity to become concentrated in major metropolitan centers, this concentration has not been so pronounced in North Carolina. There are only seven cities in North Carolina with a population of more than 100,000. On the other hand, there are many viable communities of 25,000 to 100,000 population.

Most counties, like most states, attempt to provide employment for those entering the labor force. Changes

¹ Al-Sammarie and Miller, "State Differentials in Income Concentration," *American Economic Review*, Vol. LVII, March 1967, pages 59-72.

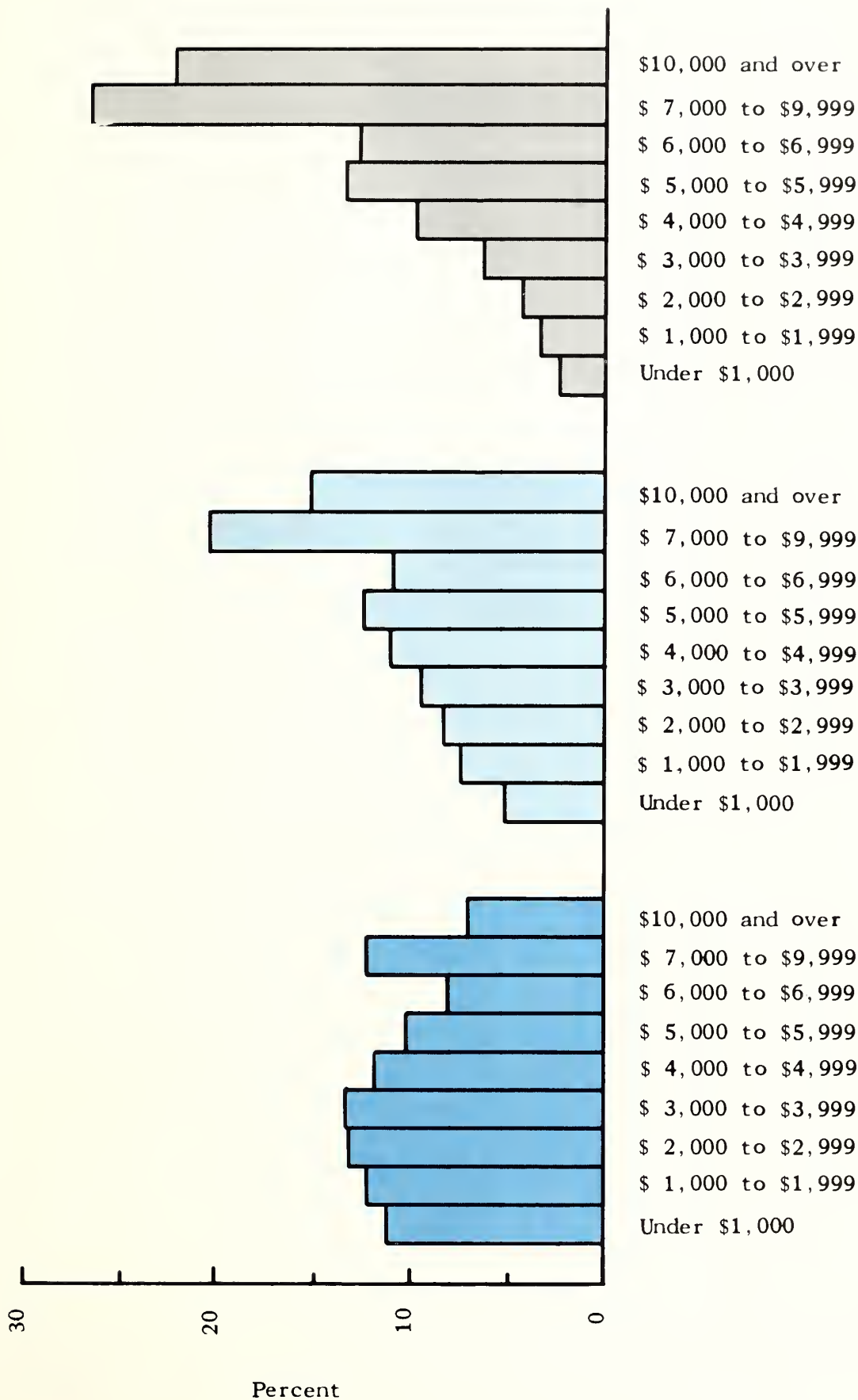


Figure 22. Income Distribution of Families and Unrelated Individuals for North Carolina, the United States, and Connecticut, 1959
Source: 1960 Census of Population, Bureau of the Census, U. S. Department of Commerce.

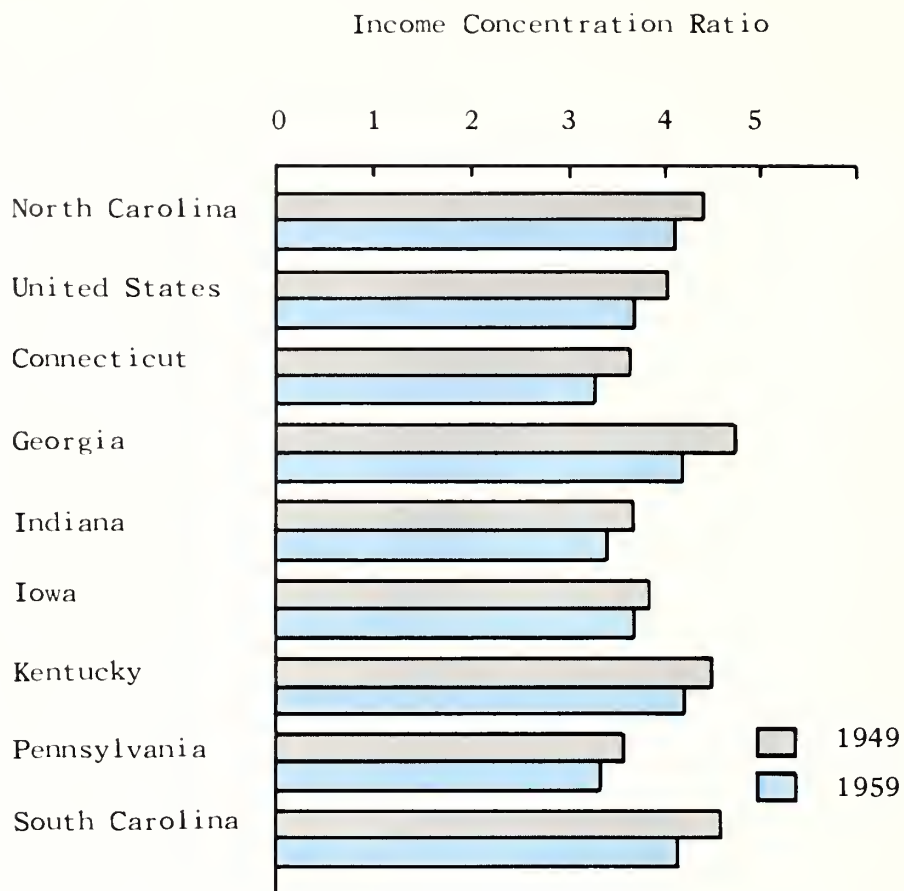


Figure 23. Gini Concentration Ratio of Family Income before Tax for the United States and Selected States, 1949 and 1959

Source: Al-Sammarie and Miller, *State Differentials in Income Concentration*, American Economic Review, Vol. LVII, March 1967, pp. 59-72

in employment are related to changes in the population of working age, by counties, in Figure 24. During the 1950's, even though the increase in employment in North Carolina was relatively small, there was high concentration of growth. In relation to the natural increase in the labor force, only seven counties provided more employment than the national average. Forty-six counties in which there would have been a net increase in population of working age, without migration, actually experienced no change or a decrease in employment.

As a result of the uneven growth during the 1950's, there was a substantial change in the share of the State's employment among counties (Figure 25). The share of the State's employment decreased in 62 counties, was unchanged in seven and increased in 31. A high proportion of the counties that were able to increase their share are in the Piedmont.

The distribution of employment gains has been much better during the 1960's. Between 1962 and 1966, only 23 counties which would have had an increase in population of working age without migration experi-

enced a decrease in employment (Figure 26). During this period, rapid growth of employment was more widespread. In relation to the potential natural increase in population of working age, 34 counties created employment in excess of the national rate. In comparison of Figures 25 and 27, improvement in the ability to create employment in relation to additions to the labor force is particularly evident in the eastern and western parts of the State. Thus, there likely was less incentive to migrate among counties and from the State than in the 1950's.

Changes in the distribution of employment growth also are shown in the share of employment in each county. Between 1962 and 1966, 39 counties increased their share of the employment in North Carolina (Figure 27). Although rapid growth continued in the metropolitan areas, the share of the employment in many counties in the Piedmont decreased, while improvement was particularly evident in many mountain and foothill counties.

Changes in the pattern of employment growth in North Carolina should be reflected in changes in the

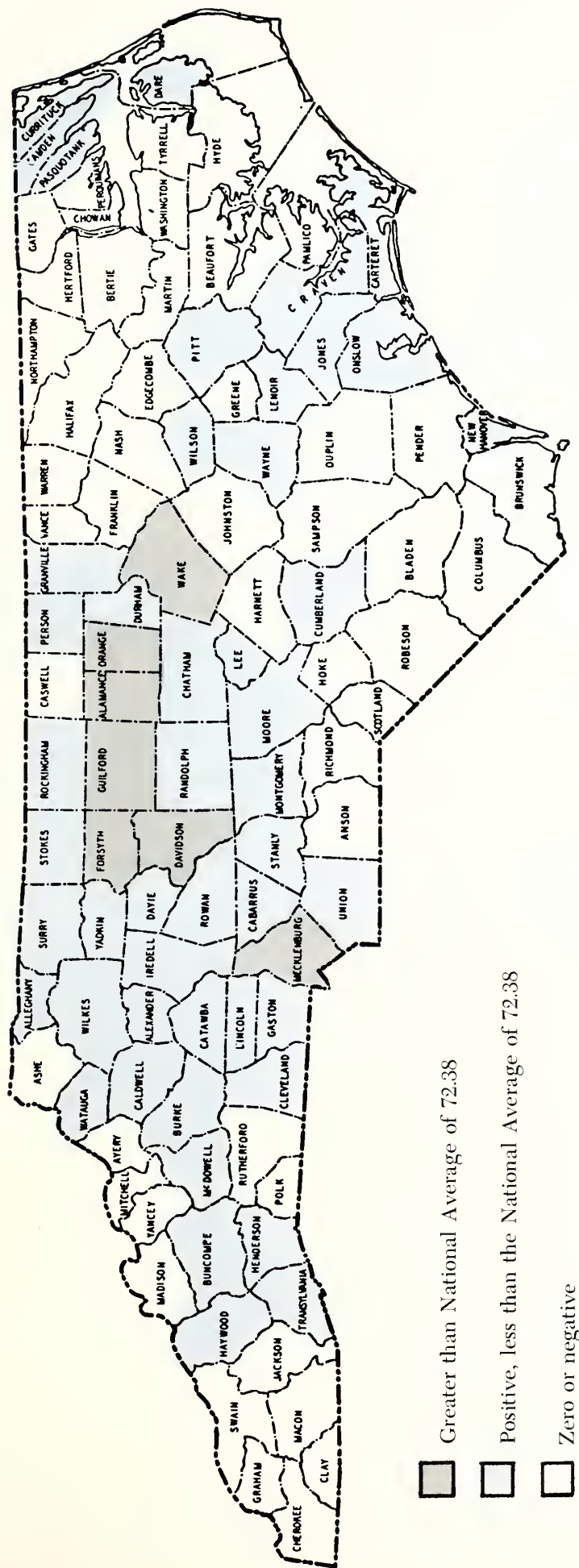


Figure 24.

Change in Total Employment as Percent of Potential Change in Population of Working Age, by County, North Carolina, 1950-60

Source:

1050 and 1960 Census of Population, Bureau of the Census, U. S. Department of Commerce, and Bureau of Employment Security Research, North Carolina Employment Security Commission

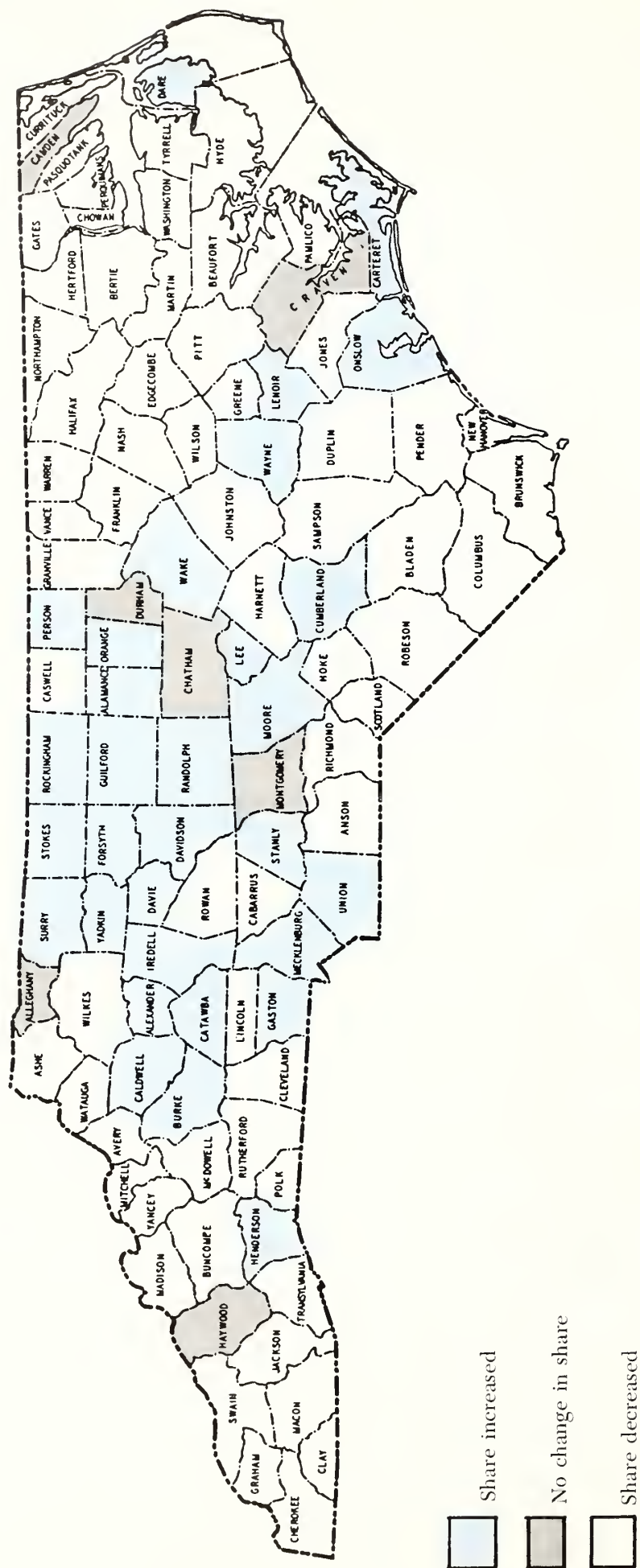


Figure 25. Change in County Share of Employment, North Carolina, 1950-1960

Source: U. S. Census of Population.

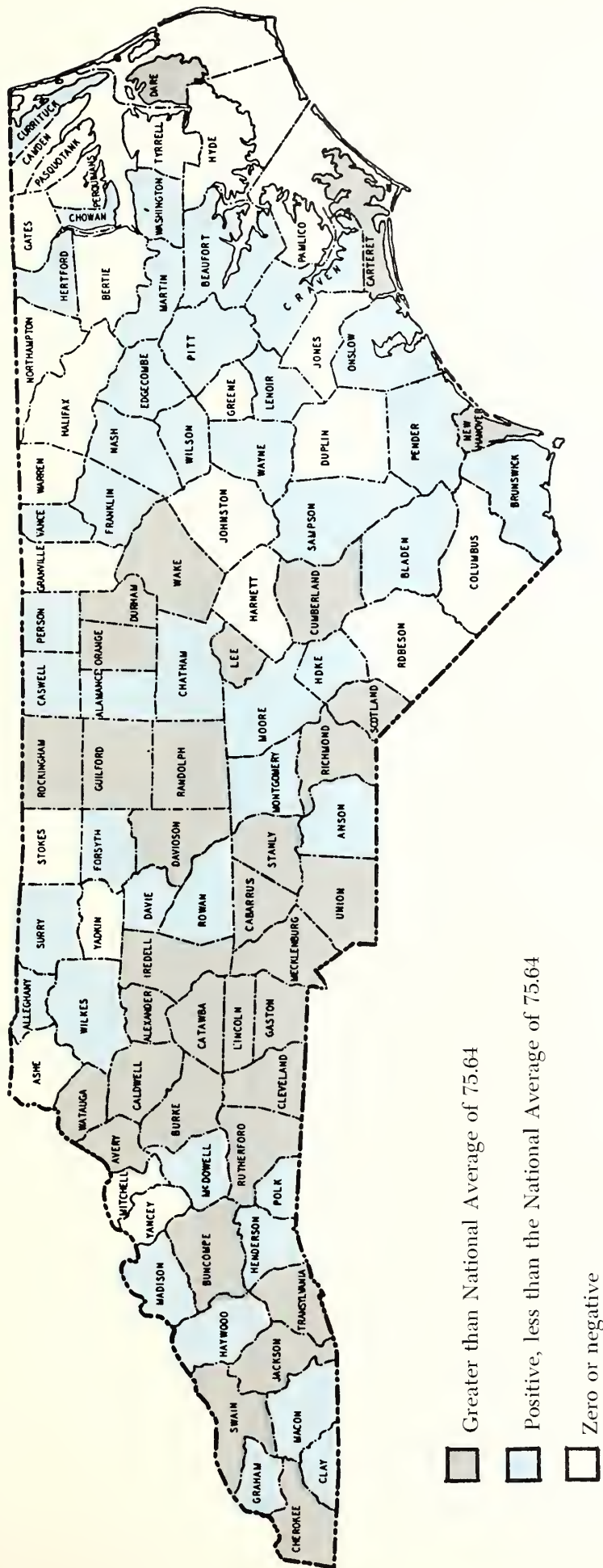


Figure 26.

Change in Total Employment as Percent of Change in Population of Working Age by County for North Carolina, 1962-1966

Source:

1960 Census of Population, Bureau of the Census, U. S. Department of Commerce and Bureau of Employment Security Research, North Carolina Employment Security Commission

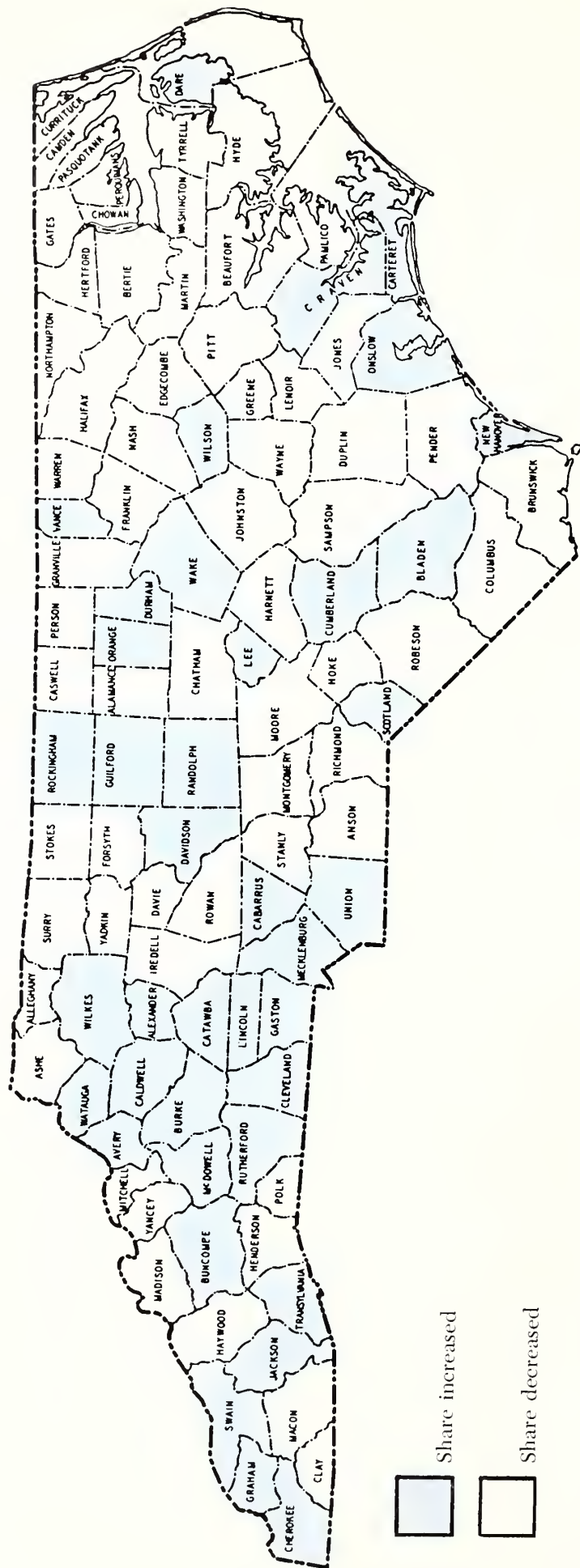


Figure 27. Change in County Share of Employment, North Carolina, 1962 to 1966

Source: Bureau of Employment Security Research, North Carolina Employment Security Commission.

pattern of income growth in the State. Data presented in Figures 28 and 29 indicate substantial differences in the counties increasing their share of the total personal income in North Carolina between 1958 and 1962 and between 1962 and 1966. During the latter period the share of income going to some of the metropolitan counties, Forsyth, Guilford and Durham, decreased. Gains between 1962 and 1966 are particularly noticeable in the mountain and foothill counties.

To what extent does per capita income differ among counties and how has the recent economic growth affected this difference? Comparison of Figures 30 and 31 reveals that in spite of recent increases in income there is a growing concentration of counties in which per capita income exceeds the State average. Although recent percentage increases in per capita income have been greater in some of the low income counties than in the high income counties, the gains in income in the high income counties have been sufficient to widen the actual difference in income between the low income and high income counties. Since 1958 there has been a substantial widening of the income gap, with per capita income rising above the State average in additional counties in the Piedmont and with an increasing number of counties in eastern North Carolina experiencing per capita incomes more than \$500 below the average for the State. Improvement in income throughout the State, therefore has not been accompanied by reduction in income differences among counties. Quite the contrary, since 1958 the differences between per capita income at the State and county levels has widened for many counties.

In summary, North Carolina has made significant progress toward achieving the basic economic goals

discussed in this study. During the 1960's employment opportunities in the State have been created in sufficient number to provide employment for most of the natural increase of the labor force in the State. Unemployment has decreased sharply, and migration from the State has virtually ceased. Significant improvement also has been made in the quality of employment in the State. A larger share of the employment in the State now is in the high growth industries. Although the wage rate in North Carolina remains very low, substantial gains have been achieved and progress is being made in closing the gap in wages at the State and national levels.

The distribution of income in North Carolina has changed significantly. There has been a sharp reduction in the number of families with very low incomes, and the concentration of incomes among families has decreased. The distribution of economic growth within the State also has improved. Employment growth has been more widespread throughout the State in recent years. This growth in employment has been accompanied by an increase in per capita income.

Nevertheless, the difference between incomes in North Carolina and the national level remains large, and it is not likely to close in the immediate future. Within North Carolina, the difference between incomes in low and high income counties continues to increase. Counties within North Carolina face the same problems in closing the income gap with the State average that the State faces in closing the income gap with the national average. In neither case, will the problem be overcome easily or quickly. Indeed, the gap will not be closed at all without resolute action to this end.

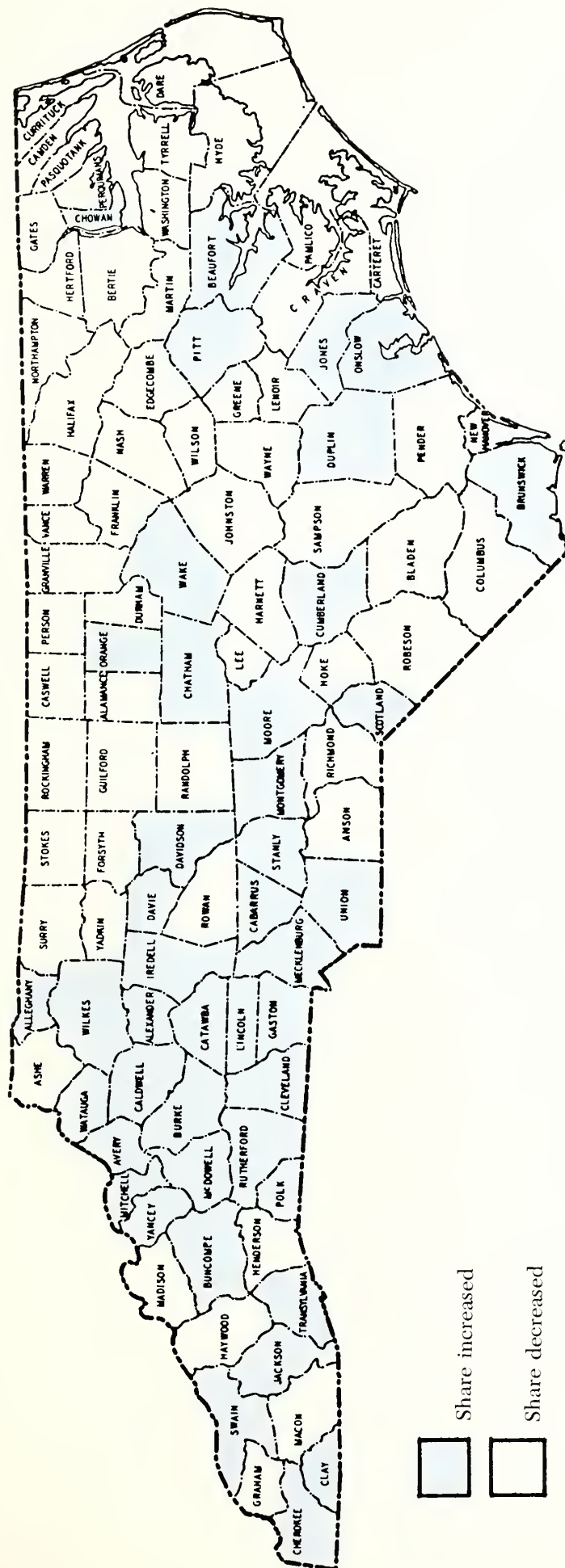


Figure 29. Change in County Share of Total Personal Income, North Carolina, 1962 to 1966

Figure 30. Real Per Capita Personal Income Gap between County and State Average, 1958 (1964 dollars)

Source: North Carolina Department of Tax Research.

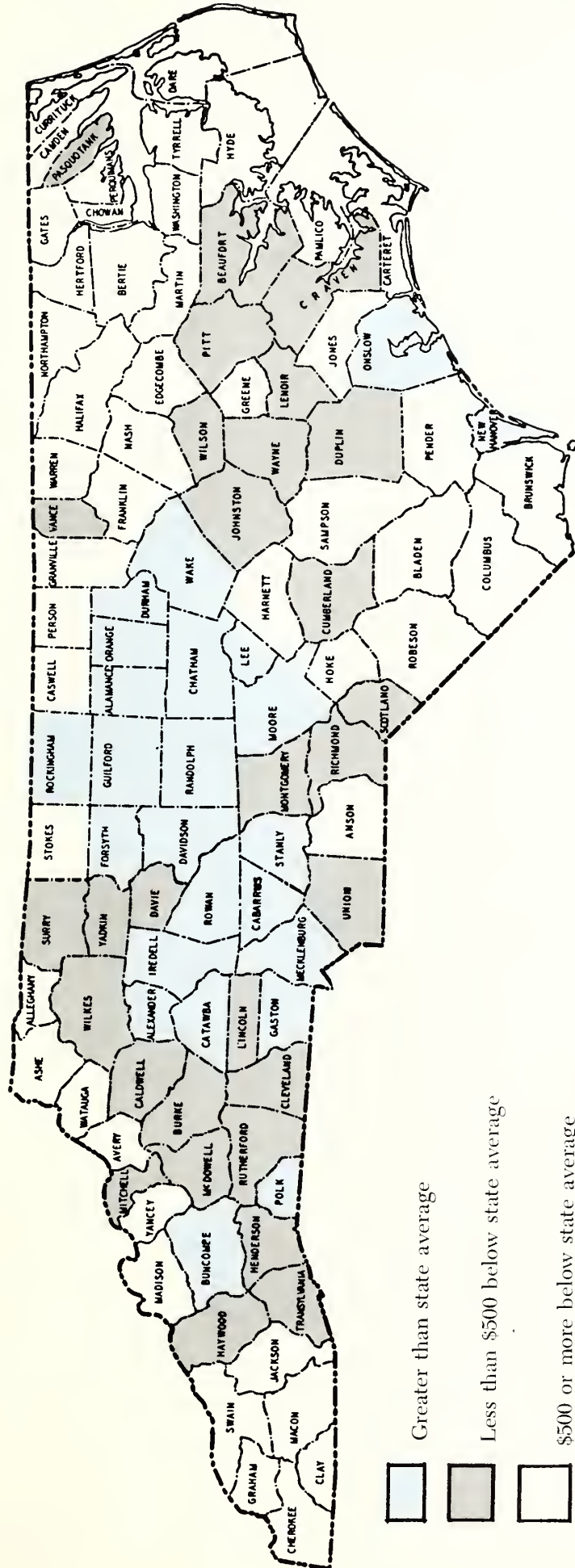


Figure 31. Real Per Capita Personal Income Gap between County and State Average, 1966 (1964 dollars)

The Base for Economic Development

The goals of development must be related to the economic base of the State. The natural and human resources of the State are an important part of this base. However, the economic base is not fixed. It can be enlarged through resource development, thereby creating new wealth. An increase in wealth comes from one or more of the following sources: discovery and utilization of new resources; increased productivity of resources; and attracting additional investment in plants and equipment or other resources to the State from other states. Wealth is created by increasing private investment in plants and equipment. It is also created by public investment in highways, schools, hospitals, and other forms of capital that increase the productivity of labor and other resources.

The Labor Force

The labor force is an important factor affecting the development of any state. The quantity and quality of labor affect labor costs in relation to value added by labor in production and, therefore, are important factors affecting the desirability of the state as a location for industry.

Although labor costs have been increasing as a proportion of total cost, there is substantial variation among industries in the relative importance of labor costs. In general, payrolls as a percentage of the value added by manufacture in North Carolina are low in comparison with other states included in this study. The 1965 Survey of Manufactures indicates that payrolls were equivalent to 45 percent of the value added by manufacture in North Carolina during that year. Except for Kentucky, the share was higher for all other states included in this study (Figure 32). The low share that payrolls constitute of value added by manufacture in North Carolina should provide an incentive for additional industrial development in the State.

Labor costs also are affected greatly by the labor turnover rate. Data for 1967 indicate that the annual labor separation rate as a share of total employment in North Carolina was 4.5 percent. Average annual labor separation rates in manufacturing are shown for North Carolina and other states for the period 1960-1967 in Figure 33. Although the rate for North Carolina is higher than for most other states included in the study, it was less than the rate for the nation as a whole. A low separation rate means that the cost of recruiting and training labor replacements is less than in other states with a high separation rate.

Unit costs of production also are affected by work stoppages. Here again, North Carolina has a favor-

able record. For the period 1960-1967 man-days idle as a percent of total working time was only two-hundredths of a percent in North Carolina (Figure 34). Only in South Carolina was the loss from work stoppage as low as in North Carolina.

The attractiveness of a state for industrial development also depends upon the long run outlook for labor supply in that state. North Carolina has a rapidly increasing labor supply. For many years the State has been a net exporter of labor to other states. During the current decade expansion of employment opportunities has been sufficient to decrease greatly the migration from the State. Migration from North Carolina can be eliminated only if enough jobs are created to provide attractive employment for those who live in the State.

The labor supply is expected to increase rapidly in the years ahead. There are three major sources of additional workers in North Carolina. First, a large percentage of the population is in the younger age group. As these young people graduate from the high schools, vocational schools, colleges and universities, they become potential additions to the labor force. Second, there are many people in North Carolina who are now underemployed or who are not now in the labor force. For example, the percentage of women participating in the labor force in North Carolina is less than that for the nation as a whole, and underemployment in rural North Carolina is extensive. As these differences are removed, the effective supply of labor in North Carolina will increase. Third, many people who were reared and educated in North Carolina and who now live in other states will return to North Carolina if the quality of job opportunities in the State improves. In addition to these sources, there is a vast number of people currently employed in low productivity uses whose skills can be quickly upgraded to qualify them for employment in more productive jobs.

Without question, North Carolina will have a large potential addition to its labor force during the next few years. Whether the labor will have the skills necessary to improve substantially the industry mix and occupational structure in the state is less certain.

The median number of years of schooling completed by males in North Carolina is relatively low among the states with which comparisons are made in this report (Figure 35). There were 65,009 students graduated from high schools in North Carolina in 1967. But when this class was in the fifth grade, there were 39,625 additional class members. The continuing high dropout rate and the large percentage of the people with less than an eighth grade education attest to the

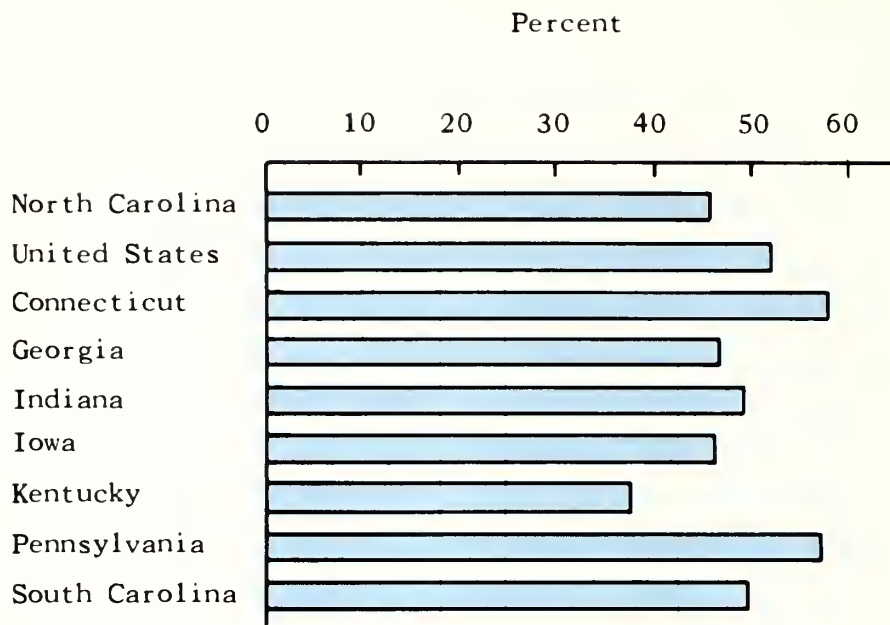


Figure 32. Payroll as Percent of Value Added by Manufacturer, 1965.

Source: *1965 Annual Survey of Manufactures*, Bureau of the Census, United States Department of Commerce.

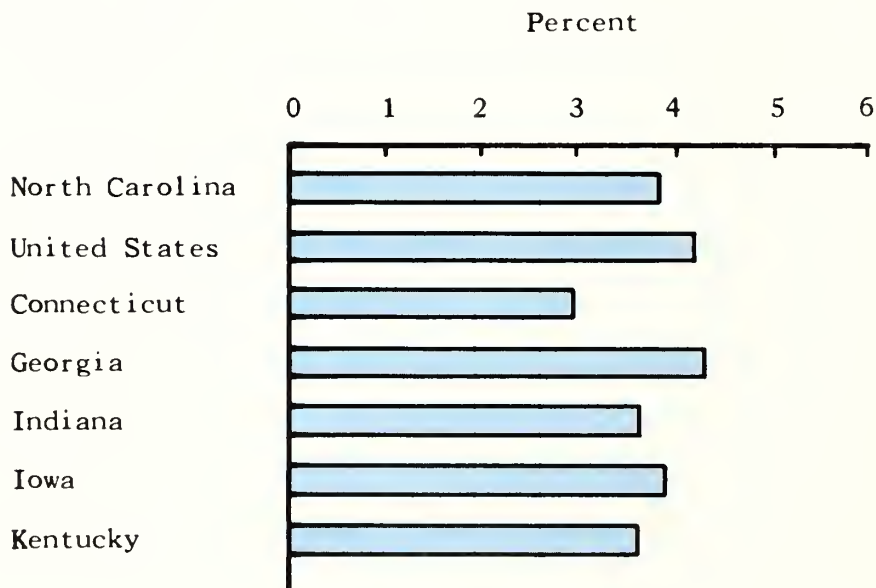


Figure 33. Annual Average Labor Separation Rates, United States and Selected States, 1960-67

Source: *Employment and Earnings and Monthly Report on the Labor Force*, Bureau of Labor Statistics, U. S. Department of Labor, April; June; August; October; December issues in 1967 and March, 1968.

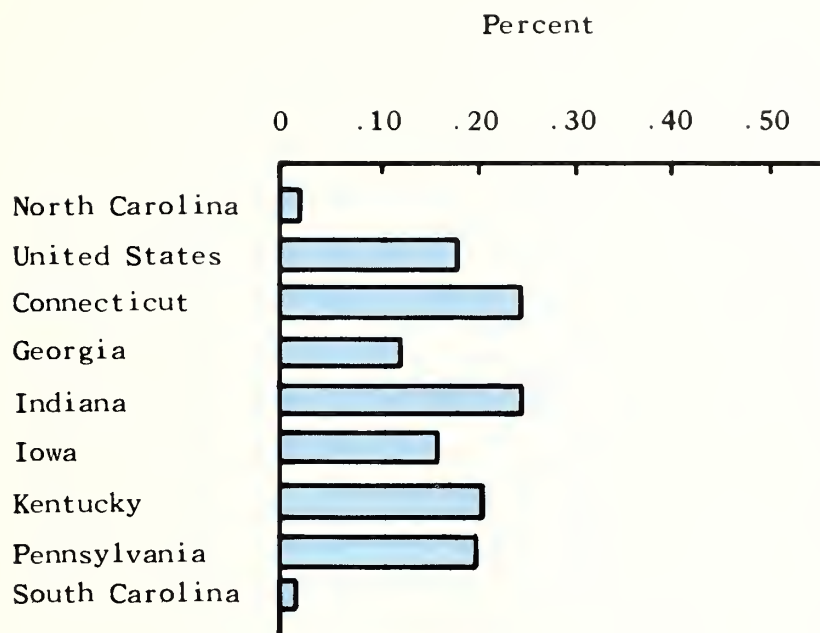


Figure 34. Man-Days Idle as Percent of Estimated Total Working Time, by State, 1960-67

Source: *Statistical Abstract of the United States, 1967*
Bureau of the Census, U. S. Department of Commerce.,
p. 250

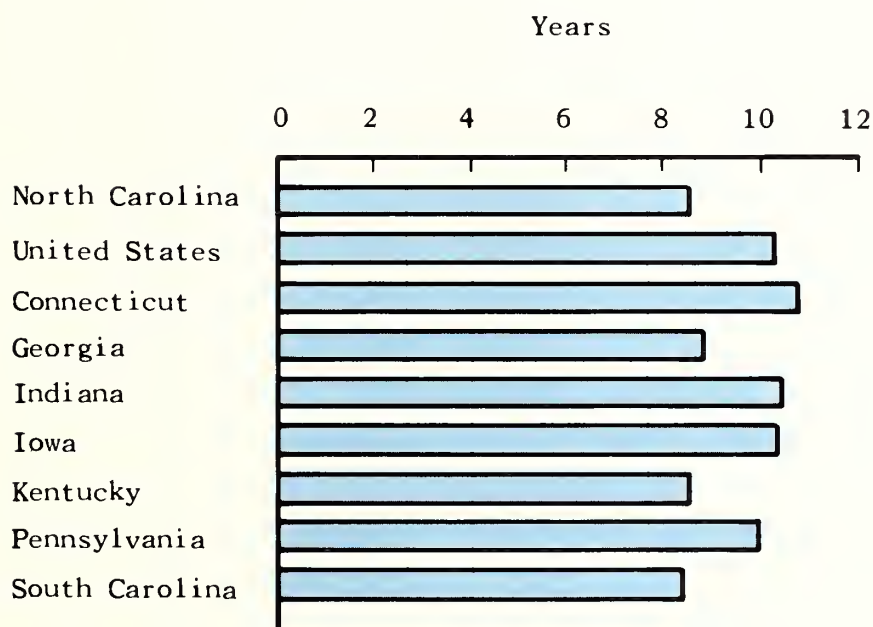


Figure 35. Median Years of School Completed by Males 25 Years Old and Over, 1960

Source: *1960 Census of Population*, Bureau of the Census, U. S. Department of Commerce

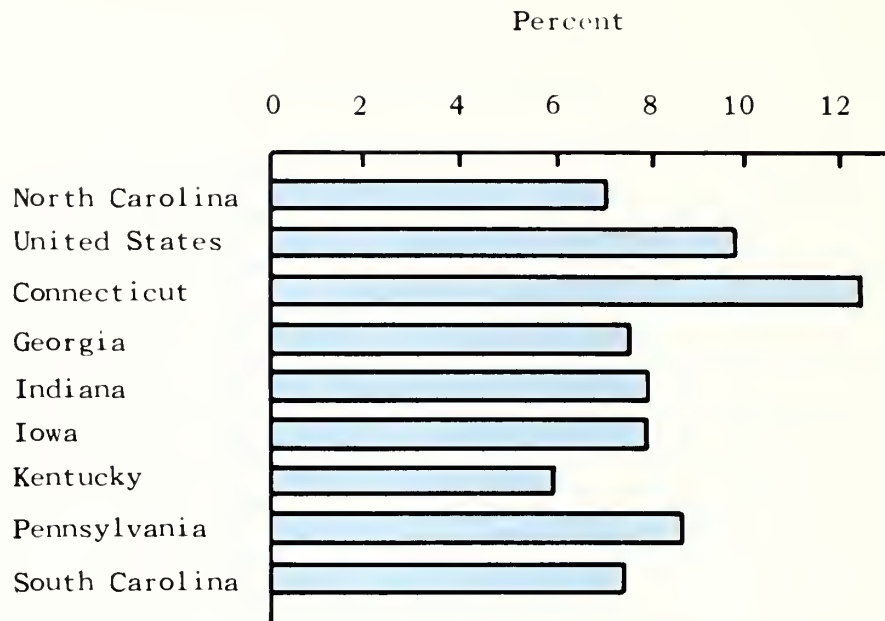


Figure 36. Percent of Males 25 Years Old and Older Who Completed 4 or More Years of College, 1960

Source: *1960 Census of Population*, Bureau of the Census,
U. S. Department of Commerce

need for more effective human resource development programs in the State.

Participation in post high school education programs is not high in North Carolina. It is estimated that only 57 percent of those graduating from high schools in North Carolina in 1967 either enrolled in additional educational programs or entered military service. The percentage of all males 25 years and over who have completed college in North Carolina is lower than that of any other state included in this study except Kentucky (Figure 36). Only 6.9 percent of the males 25 years of age and over in North Carolina had completed college in 1960. The comparable figure for females was 5.7 percent.

In recognition of the fact that a high percentage of the people graduating from high schools in North Carolina do not attend or complete college, the State has developed a comprehensive system of community colleges and technical institutes. These institutions provide both vocational and general educational programs. In 1967, there were 50 community colleges and technical institutes in North Carolina with a total enrollment of 166,033. In spite of the recent growth in attendance at the community colleges and technical institutes and in the other colleges and universities of the State, a very high percentage of the labor force in the State receives no formal education or training beyond the general education provided in the public schools. This fact emphasizes the need for greater

participation in occupational preparation programs for youth in North Carolina.

In view of the basic changes taking place in the structure of the national economy, and indeed even of the economy of North Carolina, there is an obvious need for more effective development of the human resources in the State. This need includes the education of many more people to meet the standards of employment in the professions as well as a massive program for reclamation of the human resources that are currently underemployed or employed in jobs yielding incomes too low to provide above poverty levels of living. A high percentage of this labor already has experience in industrial employment. The major needs are clear. General education must be improved; training programs in rural areas must place greater emphasis on nonfarm vocational training; testing and occupational counseling programs must be expanded in all schools; effective coordination of occupational education and training and job placement is essential; and relocation assistance provided through and based upon the advice and counsel of the Employment Security Commission should be expanded.

Natural Resources

North Carolina's natural resources are important in determining the potential for development in the State.

The soil and climatic resources are especially important to the agricultural and forest industries. The long growing season and abundant rainfall are major factors influencing the kinds of products produced in the State. North Carolina's agricultural and forest industries rank among the largest in the United States.

The water resources of the State constitute a growing source of income from industrial development and recreation. North Carolina has a 320 mile coastline. It has two natural deep water ports. Recent development of the ports has strengthened possibilities for increased sales abroad and decreased the cost of transportation between North Carolina and other states. Traffic through these ports is increasing rapidly. Between 1964 and 1968, the tonnage of general cargo going through these facilities increased from 786,524 to 1,085,574 tons.

The marine resources of the State are substantial. There are 2,500 square miles of estuaries, and the continental shelf extends for about 10,000 square miles off the coast of North Carolina. The potential development of these resources for fishing, recreation, minerals and other commercial uses is now being studied.

The supply of fresh water in North Carolina is abundant. Although the State does not have a large river system, it has 16 river basins, and it is generally regarded as having water of high quality. The State is not plagued with the heavy pollution problems of most states where the industrial mix is heavily weighted with durable goods industries. The quality of water supplied by public utilities is good. It is relatively soft, of low alkalinity, and contains relatively little dissolved solids.

Three hundred varieties of rocks and minerals are found in the State. Most of these are of commercial value. Chief among these are mica, kaolin, valspar, and granite. Recently discovered reserves of phosphate have spawned hopes for the development of chemical industries. Significant deposits of minerals also exist in the ocean. Growth in the demand for minerals has generated new interest in the commercial development of mineral resources in North Carolina. Extensive explorations are now being made to determine the potential for development.

Capital Resources

Firms located in North Carolina have access to capital markets throughout the nation. Some of the largest banks in the South are located in North Carolina. They have effective working relationships with the nation's largest financial centers. Therefore, the prime rate of interest on business loans in North Carolina is practically identical with the interest rate prevailing in the rest of the nation.

The results of strongly competitive statewide bank-

ing are evident throughout the State. Four of the largest banks have assets that will enable them to make loans ranging from \$5-8 million. The State has six banks that rank in the top 300 in the nation, four in the top 100 and two in the top 50. Between 1950 and 1960, total bank resources in the State increased 167 percent—from \$2.1 billion to \$5.6 billion.

Financial institutions other than banks have also experienced rapid growth in the State and are contributing greatly to the State's economic development. Savings and loan associations increased their assets by 625 percent between 1950 and 1967—from \$331 million to \$2.4 billion. Insurance companies in mid 1967 had \$2.75 billion invested in North Carolina securities, real estate and real estate mortgages.

The leadership role performed by executives associated with financial institutions has played a significant part in North Carolina's economic development. Officers representing these institutions have served on statewide commissions and as advisors to local governments in working out problems of public finance. They have been aggressive leaders in the development of the State's agriculture and industrial economy. The role of the financial institutions in bringing about full development of the State's economy will increase in the years ahead.

North Carolina industry, like its agriculture, is heavily populated with small firms. Although the proportion of North Carolina firms employing 100 or more persons compares favorably with the other states included in this study, a very high proportion of the employers in North Carolina, as in other states, is small. Eighty-nine percent of the employing units reporting under the Social Security program in 1965 employed fewer than 20 people.

Many small firms lack the venture capital to introduce new products and to expand their size. In order to provide a better source of capital for small firms, the State of North Carolina recently created a business development corporation. This corporation issues bonds and makes loans to small businesses. In addition, many municipalities have organized local industrial development corporations to provide assistance to industries. Under North Carolina law, municipalities are not permitted to issue tax-exempt industrial revenue bonds. Instead, bonds are depended upon as a primary source of funds for the development of the infrastructure of municipalities.

Research and Development Resources

The development of new products and more efficient processes of production is essential to survival in modern competitive industry. The availability of research resources is a significant factor in industrial location. Institutions of higher education are the major source of scientific personnel. North Carolina has 71

Table 5. Number of Employing Units Reporting Under the Social Security Program, by Number of Employees, 1965

Area	Number of Reporting Units	1 to 19	Number of Employees	
			20 to 99	100 or more
(Percent)				
North Carolina	79,891	89.2	8.5	2.3
United States	3,521,554	89.9	8.3	1.8
Connecticut	53,976	89.2	8.7	2.1
Georgia	71,293	89.4	8.7	2.0
Indiana	83,282	89.5	8.4	2.0
Iowa	59,466	93.0	6.0	1.0
Kentucky	48,823	91.1	7.5	1.4
Pennsylvania	197,039	88.7	8.8	2.4
South Carolina	37,349	90.2	7.7	2.0

Source: *Statistical Abstract* 1967, page 487

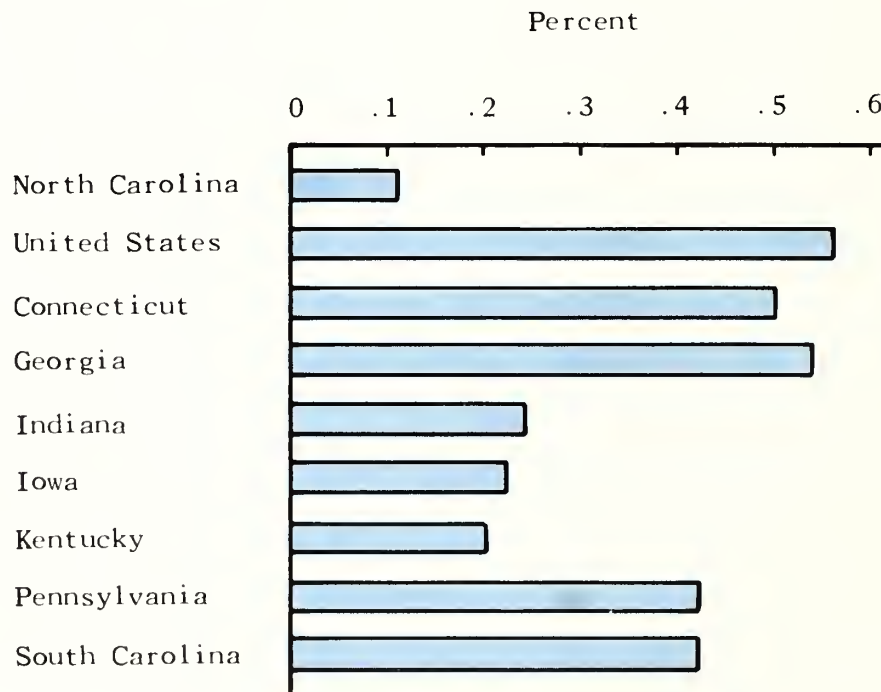


Figure 37. Average Rate of Industrial and Commercial Failures as Percent of Concerns in Business, by State, 1960-67

Source: *Statistical Abstract*, 1967, Bureau of the Census, U. S. Department of Commerce, p. 502. (Originally from Dun and Bradstreet.)

colleges and universities, of which 44 are senior colleges and universities. Two of these, the University of North Carolina and Duke University, are members of the American Association of Universities. The universities in the State have extensive research programs and offer consultation and other services for industry.

In addition to the universities and colleges, there are a number of research parks in the State. Many firms have located research and development offices in the Research Triangle Park. The Research Triangle Institute is one of the most rapidly growing research institutes in the United States. The Institute offers scientific consultation to firms throughout North Carolina and in other states. Many publicly supported education programs also have been developed to meet the needs of industries in the State. The State Technical Services program provides technical services to firms. The extension programs of the University provide general educational and technical services throughout North Carolina.

Access to Materials and Markets

North Carolina has a major network of highway, rail, and air routes, and two sea ports. The network of transportation facilities forms an interconnecting web with the major cities in North Carolina and in other states. This network provides ready access to suppliers of raw materials and to markets for much of the State. The transportation routes in the western and Piedmont areas of the State provide effective linkages with Atlanta, Knoxville, and other major metropolitan centers in nearby states. In contrast with the rest of the State, the Coastal Plain east of Raleigh does not have a major metropolitan center. This is reflected in the

transportation system. There is no highly developed air transport facility in the East. There are no major highway or rail corridors linking the ports effectively with the channels of trade in the rest of the State or with metropolitan centers in other states. Instead, the interstate highway system links most of the State with the port at Charleston, South Carolina. Access to the recreational areas on the coast is limited by lack of a major highway linking the population centers with the coast. Access is much better in neighboring states. Improvements in the transportation system in the eastern part of the State likely will be necessary for rapid expansion of the area.

The Record of Business Successes

Perhaps the significance of the factors constituting the economic base can be most appropriately weighed in terms of the record of success of firms located in the State. For this purpose, it would be desirable to have information comparing the relative profitability of firms in North Carolina and in other states. Unfortunately, such information is not available. Information is available, however, on the number of firms going into bankruptcy in each state.

The number of bankruptcies in North Carolina per 10,000 firms operating in the State is low in comparison with the other states included in this study (Figure 37). The bankruptcy rate in North Carolina is only one-fifth that of the nation as a whole. This record suggests that firms operating in the State are able to hold their own in competition with firms operating in competing states. It reinforces the conclusion reached earlier in this report that industries now operating in North Carolina have a competitive advantage.

Employment and Income Projections

In the preceding pages, it has been emphasized that in recent years North Carolina has made a significant improvement in its share of the nation's employment and income. How fast will employment and income grow in North Carolina in the years ahead? Can the State continue to improve its share of national employment and income? Will North Carolina be able to provide satisfactory employment for the increase in its labor force? Obviously, these questions cannot be answered with precision. There is sufficient information available, however, to obtain a reasonable estimate of the prospects and to identify the major impediments to more rapid growth.

The level of employment and unemployment in the national economy will continue to have a significant influence on the future growth of North Carolina. It has been shown in this report that as the national economy grows and develops, North Carolina shares in this growth. If the United States is able to maintain a tight labor market, with low unemployment at the national level, North Carolina should continue to experience rapid growth in employment and in incomes with little net migration from the State. On the other hand, if the rate of unemployment increases at the national level, unemployment also will increase in North Carolina incomes will grow more slowly, and the difference in incomes of people living in North Carolina and in the rest of the nation likely will increase again.

The rate of growth in the State also will be influenced greatly by changes in its industry mix. It has been emphasized in this report that North Carolina's industry mix is heavily weighted by industries that grow at a relatively slow rate nationally. It was noted, however, that the industry mix in the State is changing, with a higher percentage of employment in the rapid growth industries than previously was the case. It also was pointed out that improvements in the industry mix are accompanied by a change in the occupational structure of employment, with a higher percentage of employment in the high wage occupations. The extent to which income will increase will depend upon the ability of the State to continue to effect improvements in its industry mix and occupational structure.

The basic trends that have shaped the course of North Carolina's development in the past are likely to continue in the future. The major questions concern whether the State will be able to make changes at a rate sufficient to improve substantially its income and employment position.

Three sets of projections have been developed to help us gauge the magnitude of the task in the future

development of North Carolina. The projections have been related to those of the United States Department of Labor as reported in the 1968 Manpower Report of the President.¹ The basic assumptions underlying these projections are that the United States civilian labor force will increase to 92 million by 1975, that the Vietnam War will end and that labor productivity will continue to increase at about the same rate as it has during recent years. The three sets of projections assume three different rates of unemployment at the national level: 3 percent, 3.5 percent, and 4.5 percent of the labor force. The same rates of unemployment are assumed for North Carolina.

The first series of projections, Series A, is based upon the assumption that the United States economy will revert to a slow growth situation and that the unemployment rate will increase to 4.5 percent (Table 6). It is assumed that the share of the nation's employment in North Carolina decreases to 2.60 percent, the same as existed in 1960. It is further assumed that technological progress in agriculture will continue and that there will be an annual decrease of approximately 10,000 workers per year on farms.

Under these conditions, in 1975, North Carolina would have a population of 5,680,000. Civilian employment would be 2,124,000. This would represent a net increase in employment of 206,000 from 1967. However, since farm employment is expected to decrease sharply during this period, it would be necessary for nonfarm employment to increase 268,000 in order to have the same share of the nation's employment that the State had in 1960. Since North Carolina has a larger labor force base than it had during the decade of the 1950's, a larger number of nonfarm jobs must be created annually if the State is to maintain the percentage of the nation's nonfarm jobs that it had in 1960. On the average, the State would need a net addition of 33,400 nonfarm jobs per year between 1967 and 1975.

If the State should grow no more rapidly than is implied in the Series A projections, changes in the structure of North Carolina industry probably would be small, and it is likely that there would be little, if any, improvement in the relative per capita income position of the State. In fact, the projections imply that the share of the nation's income accruing to the citizens of North Carolina in 1975 would be less than the share they received in 1967. Estimates of the personal income implied in the projections are contained in Table 7. In terms of 1964 dollars, the Series A projections imply a growth in personal income in North

¹ See *Manpower Report of the President*, United States Government Printing Office, April, 1968, page 304.

Carolina from \$11.2 billion in 1967 to \$14.9 billion in 1975. Per capita income would increase from \$2,227 to \$2,615, an increase of 17.4 percent.

The gains in employment and in income implied in the Series A projections are far too low to be acceptable as policy targets for the State of North Carolina. Income and employment in the State would be much higher if the share of the nation's employment in North Carolina in 1967 could be maintained through 1975. This would not be possible without the maintenance of a strong, viable national economy, with full employment at both the national and the State levels. If the national unemployment rate can be decreased to 3 percent and the North Carolina unemployment rate decreased to the same level, it would be possible to increase sharply the personal income of the people of North Carolina. These conditions are included in the Series B projections.

Under the conditions assumed in the Series B projections, the transfer of workers from farm to nonfarm

employment would be greater than under the conditions of the Series A projections. It is estimated that reduction in farm workers between 1967 and 1975 would be approximately 15,000 annually. Of this number, approximately 11,250 would enter the nonfarm labor force.

The Series B projections imply an increase in employment in North Carolina between 1967 and 1975 of 48,500 annually. Since there would be a net decrease in farm employment, the number of nonfarm jobs must increase almost 60,000 per year to achieve these goals.

The implied increases in nonfarm employment are very high. Such large additions have been achieved in the past in only two years, 1955 and 1966. Furthermore, the rate of growth implied in these projections cannot be sustained out of North Carolina's natural increase in the labor force. If employment is to be expanded in accordance with the Series B projections, North Carolina must become a net importer of labor.

Table 6. Projections of Selected Economic Variables for North Carolina to 1975

Item	Series A	Series B	Series C
<i>North Carolina</i>			
Population	5,680	5,840	5,738
Civilian Labor Force	2,224	2,369	2,287
Civilian Employment (head count)	2,124	2,289	2,207
Civilian Employment (job count)	2,216	2,398	2,303
Increase in Employment, 1967-75	206	388	293
Nonfarm Job Increase, 1967-75	268	478	368
Unemployment	100	71	80
Out-migration, 1967-75	58	- 102	0
<i>Basic Assumptions:</i>			
<i>UNITED STATES</i>			
Employment (million)	85.3	87.2	86.6
Rate of Unemployment (percent)	4.5	3.0	3.5
<i>NORTH CAROLINA</i>			
Labor Force Participation Rate (percent)	60.0	62.0	61.0
Unemployment Rate (percent)	4.5	3.0	3.5
Decrease in Workers on Farms, 1956-75 (1000)	82.0	120.	100.
North Carolina Share of National			
Employment (percent)	2.60	2.75	2.66
Workers on Farms as Percent of			
Total Employment (job count)	9.3	7.0	8.2

A migration to the State of approximately 12,700 persons per year would be required to sustain the level of employment implied in the Series B projections. Under these conditions, it would be necessary for the wage rate in North Carolina to rise substantially, and some improvement would be necessary in the wages paid in North Carolina relative to wages in other states. In like manner, some improvement in the relative per capita income position of North Carolina would occur. Under the Series B projections, it is estimated that per capita real income would increase 35.4 percent and that total personal income would increase 57.3 percent between 1967 and 1975.

It is very doubtful whether the high rate of growth in employment implied in the Series B projections can be maintained. In the past, the State has been acquiring large additions to its employment in industries that are growing slowly, if at all, at the national level. The heavy dependence of the State upon employment in agriculture, textile, apparel and wood products industries raises a serious question with respect to the ability of the State to generate the number of jobs implied in the Series B projections.

Under the conditions of the Series B projections, it would be necessary to increase greatly the productivity of labor in the major industries in the State in order to justify a substantially higher wage rate. Such steps probably would require extensive changes in technology including much greater use of labor saving techniques in production, thereby, decreasing employ-

ment in relation to production. For these reasons there is serious question concerning whether the farming, textile, apparel and wood products industries can expand their employment in line with the expansions implied in the series B projections. Perhaps the best that can be expected is to continue to expand employment in the State at a rate sufficient to maintain net out-migration at a zero level.

The series C projections were developed on the assumption that economic growth in North Carolina would be just sufficient to provide employment for the additions to the labor force in the State between 1967 and 1975. There would be no net migration from the State or to it. If the State is to expand at this rate, the unemployment rate at the national level as well as in North Carolina must be low. Under these conditions, the labor force participation rate in North Carolina would remain high, and the number of workers employed on farms would continue to decrease. It is estimated that the number of workers on farms would decrease approximately 100,000 workers, 75,000 of whom would enter nonfarm employment. Employment in North Carolina in 1975 would be 293,000 greater than in 1967, and North Carolina would have 2.66 percent of the nation's total employment. In order to achieve this growth in employment, an expansion in nonfarm jobs of approximately 368,000 would be necessary. This is a net increase of 46,000 nonfarm jobs per year.

Under the conditions implied in the Series C projec-

Table 7. Personal Income in North Carolina, 1950-1967, and Projected to 1975

Year	Personal Income	
	Total 1964 million dollars	Per Capita 1964 dollars
1950	5,444	1,338
1955	6,454	1,521
1960	7,486	1,636
1967	11,198	2,227
1975 projections:		
Series A	14,851	2,615
Series B	17,614	3,016
Series C	16,088	2,804

Source: *Survey of Current Business*, August 1967, April 1968

Projections based on relationship between per capita income and total employment in North Carolina. For the period 1950-67, the relationship is based on regression, $Y = -466.5517 + 0.6369X + 0.00034X^2$, where Y is per capita personal income in millions of 1964 dollars and X is employment in thousands. The relationship is highly significant with an R^2 of .98117.

tions, personal income in North Carolina would grow at a moderate rate, increasing from \$11.2 billion in 1967 to \$16.1 billion in 1975, an increase of 44 percent. Per capita incomes would increase from \$2,227 in 1967 to \$2,805 in 1975, an increase of 26 percent.

The employment projection of the C Series represents a reasonable upper limit on employment for the period under consideration. It may be considered as a target. It will not be achieved, however, without continued rapid growth in the national economy and with-

out continued alteration of the industry mix and occupational structure in North Carolina. On the other hand, the income projection in the C Series need not be taken as a target. More effective programs of education and training to increase the productivity of our human resources and to improve the industry mix and occupational structure should enable North Carolina to exceed the income projection of the C Series even if employment does not exceed the projected level.

Public Policies for Future Growth

In this report it has been shown that North Carolina has made substantial economic progress during the current decade. It also has been emphasized that in spite of the progress that has been made the State continues to occupy a relatively poor income position. This section outlines some actions by government that would enhance economic development. As our economy has become more complex, the role of government and public policy has become more important in economic development. If North Carolina is to improve substantially its income position, federal, state and local governments must assume more positive roles in economic development. What are the public policies and programs that will be necessary if the State is to continue to make progress in attaining its goals of more efficient use of its resources, higher earnings for resource services, improving the distribution of income among the people of the State, and achieving a better geographic distribution of income in North Carolina? Some of the improvements that are necessary are clear.

1. *The maintenance of full employment in the United States is a necessary condition for substantial improvement in the income position of North Carolina.*

Numerous studies have shown that North Carolina and the South make their greatest gains in employment and in incomes when the national economy is growing rapidly. A high rate of growth provides opportunities for reducing unemployment and underemployment in the State. During periods of rapidly expanding employment, the wage rate in North Carolina increases. North Carolina, therefore, has a great interest in the maintenance of full employment in the United States. The State should exert every effort to assure that the monetary and fiscal policies of the federal government are consistent with full employment nationally and that due consideration is given to the regional impacts of federal policies.

2. *The earnings of labor must be increased in order to improve the relative well-being of many people in North Carolina.*

The heavy dependence of North Carolinians upon the earnings of labor has been emphasized in this report. Without an increase in the productivity and earnings of labor, an improvement in the relative income position of North Carolina will be exceedingly difficult to achieve. Improvements in wages are achieved mainly through providing more and better employment opportunities for those in the labor force, by increasing the percentage of the population with employment, and by enhancing the ability of labor to produce through investment in upgrading labor skills and through improvements in production technology.

Modern industry is built on science and technical

efficiency. If the State is to continue to improve the quality of its employment, it must provide the scientists needed to meet the requirements of modern industry. It must also develop a labor force that has the technical competence to make effective use of highly sophisticated machinery and equipment. Many people in North Carolina, especially in the rural areas, have received education ill-suited to the needs of modern industry. Better education and training will help them to obtain better employment and higher earnings.

Programs that will generate higher earnings for labor also should improve the distribution of income among the people. Adult basic education and technical training should increase the productivity of labor and should provide greater incentives for labor force participation. More effective occupational counseling, training and placement, including possible relocation of workers, and follow-up programs, should increase the earning power of those who now receive low returns for their labor.

3. *Efforts must be continued to improve the geographic distribution of income and to control the growth of urban complexes in North Carolina.*

The needs vary in different parts of the State. The Piedmont has the necessary conditions for rapid growth and development. It should continue to grow. In the Piedmont one of the main considerations should be the development of urban complexes that are desirable places in which to live and to work. Without orderly planning, North Carolina can expect to develop large cities and slum conditions in the Piedmont similar to those existing in many northern states. Although the population already has become quite dense throughout much of the Piedmont, there is still ample time to develop an orderly plan for industrial development, housing and other uses of land and other natural resources in the area. The State must become a more positive force in assisting local governments to shape the development and in providing for the interests of future generations.

In the western and eastern parts of the State, the principal need is to develop the base for additional sources of income. If sound planning is undertaken the natural resources of these areas will provide the base for additional recreational complexes for the future. These two areas of the State also should develop more extensive industrial complexes. In fact, it is unlikely that relative per capita incomes of the regions will be improved substantially without a larger industrial base. With this in mind, special efforts should be made to concentrate investments in the infrastructure in key locations in order to provide the conditions for the development of urban complexes in each of these regions. The need is most important in the eastern part

of the State. The development of a concentrated urban base in the region would foster the growth of satellite cities and probably would be followed by economic growth throughout the region.

4. *One of the most critical aspects of achieving a rapid rate of high quality development in North Carolina in the years ahead will be the ability of State and local governments to plan effectively.*

North Carolina has established the basic machinery within State government to accomplish strategic planning for economic development. The Governor's office, through the Department of Administration, has final responsibility for planning. The State Planning Task Force Division has been established within the Department of Administration to provide professional assistance to the Governor in meeting the planning needs of the State. This organization has responsibility for assisting in the development of short-term and long-term plans and for effecting inter-governmental relations that will permit efficient utilization of resources at all levels. One of the basic functions of the Task Force is to integrate federal programs into State and local programs so that they make maximum contribution toward State economic goals.

In order to increase its effectiveness, the Task Force needs to be strengthened. Its major function should be reoriented to strategic planning. It should be given the designation of Division of State and Regional Planning, remaining in the Department of Administration. It should serve as an arm of the Governor in appraising long-range and short-range development plans for the State. It should prepare and revise periodically comprehensive plans for achieving the State's goals. In conjunction with the Budget Division, which should provide the fiscal inputs against which the planning targets should be appraised, the planning office should serve as a center for priority analysis, providing the Governor with the basic information necessary for policy decisions.

The growth in responsibilities of city and county governments has increased the complexity of these governments and enlarged the area of interdependence of local, State, and federal programs. It is now imperative that federal, State, and local policies and programs be coordinated.

The Division of State and Regional Planning should be strengthened in its ability to help local governments plan for economic development. In carrying out this function, the Division should encourage the establishment of multi-county development districts and economic development commissions. Several of these are functioning already in the State. In the Appalachian Region, multi-county planning districts have been established primarily in response to the Appalachian Regional Development Act. Others in the eastern part of the State were prompted by the Public Works and

Economic Development Act of 1965. Still others have been organized under State statutes without specific relationship to a federal program.

The State has enabling legislation under which multi-county planning organizations may legally be constituted. The major need is to create a statewide system so that the multi-county organizations relate effectively to one another and long-range development programs can be coordinated throughout the State. In order to bring about such a system, State government must cooperate with local governments in delineating multi-county districts. Local governments can be encouraged to form multi-county development districts if the State will provide planning grants to the economic development commissions.

The administrative districts of State agencies should be coordinated with the multi-county development districts when feasible. In some instances, it may be desirable to locate State employees in the local districts.

Local governments are in need of planning assistance. They also need to know more about the more than 400 federal grant programs and how these programs can be used to promote local economic development. Many local governments are not able to employ efficiently the full range of specialists needed to carry out the expanded functions of local government. Some of the necessary professional skills can be provided more economically on a statewide or regional basis.

Technical assistance to local governments can be strengthened by the creation within the Department of Administration of a Division of Community Services. The work of this Division should be coordinated closely with the work of the Division of State and Regional Planning.

The Division of State and Regional Planning should have responsibility for working with multi-state regional development commissions (including the Appalachian and Coastal Plain Regional Commissions) in those aspects of regional plans that relate to North Carolina. Only in this way can systematic and consistent planning throughout the State be assured.

In order to carry out the functions envisioned, the Division of State and Regional Planning will need at least four sections: state plans, regional plans, multi-county plans, and inter-governmental relations.

The State must assume a more positive role in assuring good government at the local level. The unevenness of economic development in North Carolina has created diverse problems in adapting the structure of local government to changing economic and social conditions. During the early 1930's North Carolina wisely established a Local Government Commission. This Commission is vested with the authority to approve bonds issued by local governments in the State. This is an important aspect of economic development.

If the Division of State and Regional Planning is to

operate as outlined above through multi-county development districts, it would be desirable to coordinate the planning function with authority to issue bonds. In order to effect such coordination the Local Government Commission should advise the Division of State and Regional Planning concerning projects for which bonds are proposed at the local level. In this way consistency between State and local planning can be assured.

Government needs information concerning how its programs will affect private enterprise. Likewise, the private sector cannot plan effectively without knowledge of the developmental policies of government. In order to provide a channel for consultation between government and the private sector an Advisory Council on Planning and Development should be created to advise the Governor and the Division of State and Regional Planning on the development and implementation of long range goals for the State. The Council should be composed of fifteen to twenty members, and should meet quarterly to hear reports from the Division of State and Regional Planning. The Chairman of the Council for Economic Development should be designated by the Governor and assigned the responsibility for transmitting specific recommendations to the Governor following each meeting of the Council.

A Human Resources Development Council should be formed to advise the Governor on the implementation and coordination of the many human resource development programs in the State. In recent years there has been a growing awareness of the importance of investment in human resources. This increased awareness has been accompanied by an ever-increasing stream of new federal programs for human resource development. Many of these programs are operated outside the regular State agencies. As a result, education programs have become highly fragmented. There

is need to develop a multi-faceted system focusing upon the development of human resources. The various programs that serve the different needs of people throughout their lives should be coordinated to provide continuity. The multiplicity of programs now conducted through the departments of Public Instruction, Public Welfare, Labor and the Employment Security Commission must be coordinated through the Office of the Governor. The Human Resources Development Council would advise the Governor with respect to the effectiveness of existing programs and the desirability of initiating new programs of human resource development. It would be charged with the responsibility for studying programs at the pre-school and day care level, the elementary and secondary schools, vocational and technical schools and colleges and universities. Effective liaison should be established between the Human Resources Development Council and the Advisory Council for Development and Planning.

A Natural Resource Development Council should be created to advise the Governor on policy matters relating to the development and utilization of the water, marine, forest, soil and other natural resources in the State. As the economy of North Carolina grows the competition in demands for natural resources increases. Policy decisions with respect to natural resource use must be made in a long run context. It is especially important that competing demands be analyzed and that regulations be established regarding the use of natural resources. Once decisions have been made with respect to use of natural resources, even if by default, the costs of reversing the decisions quite frequently are prohibitive. Effective liaison should be established between the Natural Resources Development Council and the Advisory Council on Development and Planning.

Summary

The economic performance of a state is measured in terms of the well-being of its citizens. The purpose of this study is three-fold—to determine the progress that has been made by North Carolina in improving employment and income of its citizens, to identify the major impediments to more rapid development of the State, and to determine the kinds of programs that are necessary for substantial improvement in the well-being of the people of the State.

There is a sharp contrast in the economic growth of North Carolina during the decade of the 1950's and the development that has taken place during the 1960's. During the earlier decade, the State made little absolute progress, and its share of the nation's income continued to decline. In contrast, significant improvements have been achieved during the decade of the 1960's and North Carolina's share of the nation's income has increased. In 1967, total personal income in North Carolina was 50 percent higher than in 1960, and per capita personal income was 36 percent higher.

Employment has expanded rapidly during the 1960's and net migration from the State has virtually ceased. In 1967, employment in North Carolina was 17.7 percent greater than in 1960, while population was only 10.3 percent greater. Unemployment and underemployment has been decreased sharply. Although employment in the State is still heavily weighted with industries that are growing slowly, if at all at the national level, substantial improvement has occurred in the industry mix in recent years. Furthermore, North Carolina is increasing its share of the nation's employment for the industries located in the State.

Income from wages and salaries is increasing more rapidly in North Carolina than income from other sources. The wage rate in North Carolina increased relative to that of other states during the 1960's, and the difference in the average wage in manufacturing in the State and for the rest of the nation is now less than it was in 1960. Many people in North Carolina derive all of their income from wages and salaries, and improvement in wages is their only hope of achieving higher per capita income.

In recent years significant improvements have occurred in the incomes of North Carolinians. There has been a sharp reduction in the number of families with very low income, and the concentration of income among families has decreased. The distribution of economic growth within the State also has improved. Employment growth has been more widespread throughout the State in recent years. This growth in employment has been accompanied by a widespread increase in per capita income.

In spite of the progress that has been made in

increasing incomes in North Carolina, there is a clear and evident need to improve the income of a high proportion of the families in the State. Within North Carolina, the difference between incomes in low income and high income counties continues to increase. The counties within North Carolina face the same problems in closing the income gap with the State average that the State faces in closing the income gap with the national average. In neither case will the problem be overcome quickly. Indeed, the gap will not be closed at all without resolute action to this end.

The economic base in North Carolina will assure continued growth of employment and income in the State. The labor force will increase rapidly in the decade ahead. Whether the labor will have the necessary skills to improve substantially the industry mix and occupational structure in the State is less certain. The natural resources and capital resources in the State are consistent with continued recreational and industrial development. The research and development resources in North Carolina equal those of any other state in the region. A network of transportation facilities forms an interconnecting web with major cities in North Carolina and in other states. Significant improvements in the transportation system are in the planning stages. The record of business performance in the State is encouraging to the future development of industry.

In spite of the fact that continued growth and development of the State is assured, the nature and extent of this growth is less certain. If the State is to provide sufficient employment for the net additions to its labor force between 1967 and 1975, it will be necessary to add approximately 46,000 non-farm jobs per year. If the relative per capita income of the State is to be increased, there must be substantial improvements in the industry mix and the occupational structure. If all people are to share in the growth and development of the State, realistic training and employment opportunities must be provided for all citizens. If all areas of the State are to share in the income improvement more rapid development must take place in some of the low income areas of the State.

If North Carolina is to improve substantially its income position federal, State and local governments must assume more positive roles in economic development. Specific actions are needed in four areas: (1) full employment must be maintained in the United States; (2) policies should be followed at the State level that will increase the productivity and enhance the earnings of labor; (3) special efforts must be made to improve the personal and geographic distribution of

income in North Carolina; and, (4) the ability of State and local governments to plan effectively for high quality development of North Carolina in years ahead must be greatly enhanced.

During the 1960's, some of the trends associated with slow growth in employment and income have been

reversed in North Carolina. The State has now embarked upon the long, hard task of closing the gap that has long prevailed between average wages and income in North Carolina and the rest of the nation. The challenge in the decades ahead is to continue this progress.

